

EXHIBIT F

Thomas Irmiter
September 24, 2020

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
LAREDO DIVISION

BRABO INTERNATIONAL GROUP, INC.)	
Plaintiff,)	
)	
vs.)	C.A. NO. 5:19-cv-00066
)	
UNITED FIRE & CASUALTY COMPANY)	
Defendant.)	

ORAL DEPOSITION (VIA ZOOM) OF
THOMAS IRMITER
SEPTEMBER 24, 2020

ORAL DEPOSITION (VIA ZOOM) OF THOMAS IRMITER, produced as a witness at the instance of the Defendant and duly sworn, was taken in the above-styled and numbered cause on the 24th day of September, 2020, from 9:58 a.m. to 5:44 p.m., before Anne F. Sitka, Certified Shorthand Reporter in and for the State of Texas, reported by computerized stenotype machine from her residence, HOUSTON TEXAS, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto.

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1 APPEARANCES

2
3 FOR PLAINTIFF:

4 Mr. William W. Lundquist (Zoom)
5 LUNDQUIST LAW FIRM
6 743 W. 18th Street
Houston, Texas 77008
Telephone: 832-255-3014
E-mail: will@lundquistlawfirm.com

7 FOR DEFENDANT:

8 Mr. David P. Andis (Zoom)
9 GAUNTT KOEN BINNEY & KIDD, LLP
25700 I-45 North
Suite 130
10 Spring, Texas 77386
Telephone: 281-367-6555
11 E-mail: david.andis@gkbklaw.com

12
13 ALSO PRESENT:

14 Mr. Ricky Branham, Video Tech (Zoom)
15 Mr. Brian Johnson, P.E. (Zoom)
Mr. Matthew G. Spiekerman, P.E. (Zoom)

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1 THE REPORTER: We are on the record.
2 Today's date is September 24th, 2020. The time is 9:58
3 a.m. This is the deposition of Thomas J. Irmiter, and it
4 is being conducted remotely by agreement of the parties or
5 in accordance with the current Emergency Orders.

6 My name is Anne Sitka and my CSR number is 7079 with
7 SLS Litigation Services.

8 THOMAS IRMITER,
9 having been first duly sworn, testified as follows:

10 EXAMINATION

11 BY MR. ANDIS:

12 Q. Will you please state your name for the record?

13 A. Thomas Irmiter, I-R-M-I-T-E-R.

14 Q. Mr. Irmiter, when were you born?

15 A. October 19th, 1957.

16 Q. You're here today in the deposition of a matter
17 styled Brabo, International, Inc. versus United Fire &
18 Casualty Company. I take it this is not your first
19 deposition?

20 A. That is correct.

21 Q. All right. About how many times have you been
22 deposed?

23 A. Over 500.

24 Q. How many of those times were you working for an
25 insurance company directly?

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1 A. Up until about ten years ago, 60 percent of the
2 time. Now, it's about 5 percent of the time.

3 Q. Is that like in an appraisal situation or under
4 a -- like a claim investigation lawsuit?

5 A. I was -- I was speaking specifically to the 500
6 depositions.

7 Q. Right.

8 A. In other words -- I thought that was the
9 question. Sorry.

10 Q. It is. But were you deposed in your capacity as
11 an appraiser or as say a causation expert for the -- one
12 or two of the companies?

13 A. I don't believe I've ever been deposed as an
14 appraiser or an umpire.

15 Q. In terms of preparation, what did you do to
16 prepare for your deposition here today?

17 A. Well, I reviewed our -- our file, our production
18 file that we sent to you. Had a phone call yesterday
19 with -- yesterday afternoon for about 45 minutes or so
20 with Mr. Lundquist and with Mr. Johnson just to kind of
21 refamiliarize ourselves with -- with our file essentially.
22 There was no new information that was talked about in
23 that. And then -- let's see. And then I did review the
24 reports that were issued by the insurance carrier's
25 experts as well.

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1 Q. All right. That would be the engineering report
2 by BSC Forensics?

3 A. Yeah, and I believe there's -- embedded in their
4 report was a -- analysis of the -- of the roof materials.
5 I reviewed that within the body of that report and then
6 just checked to make sure the separate report matched and
7 it did.

8 Q. Approximately how much time did you spend
9 preparing for the deposition?

10 A. About four hours.

11 Q. Are you a metallurgist by training or education?

12 A. No, but interestingly enough in the last case I
13 testified in in Nueces County, there was a separate
14 challenge when I brought up issues regarding metal
15 failure. And so, the jury was exited out of the chambers.
16 There was a voir dire done based on my education, training
17 and background on the -- how metal is damage. And the
18 judge agreed to allow that testimony to proceed.

19 Q. Okay. Are you going to be offering any opinions
20 in this case with respect to the metallurgy or the
21 analysis conducted by the metallurgist?

22 A. No. In this case I relied on the metallurgist.
23 We were not asked to do a metallurgy analysis. If you
24 take a look on my screen behind me on the left, you'll see
25 a piece of equipment. We actually do analyze metal. I

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1 look in this microscope a lot at metal fatigue issues.
2 But no, on this case, I will not be offering that opinion.
3 I'll be using the opinion that's been put forth by Stolk
4 Labs.

5 Q. And you're not going to be offering an opinion as
6 to a comparison between the Stolk Labs metallurgical
7 analysis and CC Consulting metallurgical analysis?

8 A. That's a good question. I haven't been asked to
9 do that. In looking at the photos that are put forth in
10 that -- in that report for the carrier and what was being
11 reported in the captions in those photos or alluded to,
12 does not look like what I typically would see under the
13 microscope next to me. I think it's -- it's interesting.
14 I'm very familiar with microscopy. We use it. I'm very
15 familiar with TEM, PLM and SEM microscopy. I just -- some
16 of the things that he points to in terms of what he is
17 seeing based on my looking in microscopes, I would
18 disagree with.

19 Q. All right. But you've not written any kind of
20 opinion or put anything in writing with respect to the
21 metallurgical analysis other than what's in your report?

22 A. No, I have not.

23 Q. All right. Mr. Irmiter, do you -- do you have a
24 college degree?

25 A. I do.

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1 Q. What was that in?

2 A. In english.

3 Q. Is that like a bachelor of arts?

4 A. Yes.

5 Q. And when did you get your bachelor of arts in
6 English?

7 A. You know -- it's -- it's on my CV. I think it
8 was '81.

9 Q. And what university or school did you go to?

10 A. Hamline University in Saint Paul, Minnesota.

11 Q. And you're not a licensed engineer, correct?

12 A. That is correct.

13 Q. And you started off initially working as a
14 remodeler for -- for your father or his company?

15 A. Yes.

16 Q. I want to talk about the reports that are at
17 issue here today, the two reports both dated
18 December 23rd, 2019. Do you happen to have a copy of your
19 report in the Auburn matter?

20 A. I can certainly pull one up on my screen. I
21 don't have a printed copy in front of me.

22 Q. Well, just we're going to go back and forth
23 between the report and exhibits. And I thought it might
24 be easier if you actually had a copy of the report to look
25 at, separate from the exhibits that they come along --

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1 they come along. So, if it's easy enough, if you don't
2 mind, pulling up a copy of your report.

3 A. Yes, I don't know what this will do to the
4 screen. Rick may have to -- so, when I click here -- just
5 a second. All righty. I don't know if you still see me
6 or if you lost me.

7 Q. Oh, we can see you.

8 A. All right. I can't see you. But I now have
9 my -- I have the Brabo International Laredo report up.
10 And this is the one that has been Bate stamped.

11 Q. So --

12 A. So, I have Brabo 00206. So, 2060 is the first
13 Bate stamped page.

14 Q. All right. Let me pull -- let me pull mine up
15 real quick.

16 A. See if I can make this a little smaller and then
17 we might be able to -- there we go. Share the screen
18 somewhat.

19 Q. All right. So, the Brebo -- the Brabo report, I
20 believe, starts at Bates No. Brabo 2060; and the last page
21 of that report is Brabo 2466; is that right?

22 A. Just a second. Well, the document I've opened up
23 is all together and includes the photos and it is Bate
24 stamped 2823.

25 Q. You have -- that's two reports. You have both

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1 reports.

2 A. Yeah, I have them both together. I don't have
3 them separated.

4 Q. But if you would just go to Brabo 2466 for me and
5 just confirm that's the last page of the Auburn report.

6 A. Getting there. Just a minute. Yes.

7 Q. Okay. So, I just want to go through the report,
8 and I want you to tell me who did what for the report.
9 It's divided into certain sections. There's photographs.
10 There's captions. There's annotations on some captions.
11 Let's just go through it quickly. Who prepared -- well,
12 did any one person compare the complete report from
13 beginning to end as we see it here?

14 A. No, that is not our process.

15 Q. All right. So, it's a -- it's a -- it's a
16 combination of several individuals doing certain I guess
17 discreet components of the report, or how does it work?

18 A. Yeah. So, we -- we have report templates, much
19 like anybody else in this industry. This isn't the first
20 nor will it be the last standing seam metal roof that we
21 will examine for whatever the reason would be. And so, we
22 will take a template and an administrative person in this
23 case back then probably might have been -- oh, might have
24 been Adam Piero. It might have been my son Jim Irmiter.
25 Might have been Ryan Nierengarten. They would go ahead

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1 and put together the -- layout the template. So, for
2 example, on page one -- on the very opening page, they
3 would insert -- you know, they would write in storm damage
4 report, the address. They would insert that first photo.
5 They would not insert any of the information regarding
6 Mr. Johnson. He would do that himself. They would then
7 do the -- on page one under the project information, they
8 would put in the policy number, the claim number. They
9 would do background information.

10 Affectively they would -- sometimes they
11 will do some initial weather searching. When the report
12 comes to me, there will be two important distinctions:
13 There will be a section -- there will be sections of it
14 that are in yellow which means this has been peer reviewed
15 by one other person and we believe that the information is
16 correct. But that would be the address, for example, the
17 date of loss. And then the report -- the rest of the
18 report will be in red. And that would typically be any of
19 the opinions, the causation analysis, the scope of repair,
20 the building code information. That would be an
21 indication to me that that is just general background
22 template from some other project and I need to focus
23 exclusively on -- on that. In some instances -- and I
24 can't tell you right now when we work cooperatively with
25 an outside engineering firm, sometimes that will go to the

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1 engineer, depending on my schedule, and they will then go
2 through and review it and -- or sometimes it will go to
3 me.

4 By the time it would go to either the
5 engineer or myself, everything then would be in yellow,
6 meaning it's been now looked at either by myself or by the
7 engineer. And then we would start our dialogue back and
8 forth, generally on the phone with the document open to go
9 through any issues that we have with the reports so that
10 we can finally both agree to put our signature on. So,
11 that's sort of a long-winded view of how these go
12 together.

13 Q. With respect to the weather section, who
14 prepared, researched and -- or prepared the weather
15 section of these reports?

16 A. In this case I did. I am trained as a weather
17 spotter with NOAA and have specific training in how to
18 harvest this information from the severe weather data
19 inventory. So, what I would do -- if you take a look at
20 section 1.2, for example, what I would do on that site is
21 I would enter in the -- either the address or the
22 coordinates. In this case we did the coordinates, the
23 latitude -- latitude and longitude.

24 The next column found in the left says
25 "select the year." So, what I would typically do in this

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1 case is I would go from -- back ten years. And then I
2 would look -- if this is a -- the first thing that I do is
3 I look for storms. I look in what's called the -- the
4 filtered storm category to see if there were any large
5 storm events near these coordinates in any of those years.
6 If there were, then I would pick that date. So, there may
7 be, for example, 42 filtered storm events on a specific
8 date in 2014. Then I would take that same date and I
9 would go to all hail signatures and then I would go to
10 filter hail signatures and then I would go to mesocyclone
11 data and then I would go to digital mesocyclone and then I
12 would do tornado data.

13 So, I'm really looking at the storm in
14 general, the hail size if there is hail that's been
15 reported. This then gives me a map of what's happening in
16 proximity to that location. So, that's -- that's
17 basically how we harvested the information for here.

18 Q. Now, with respect to the documents that were
19 received and then used as reference, is that -- other than
20 obviously the documents received in particular to the
21 claim, is that something that is generally in all your
22 reports the same documents plus or minus a --

23 A. Yeah, but there's spec- -- it's specific to the
24 type of loss. My deposition on Monday was -- was a fire
25 loss. So, you would see a completely different set of

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1 reference documents in there. Here it's specific to the
2 type of products primarily that we find at the site. I
3 wouldn't put, for example -- I wouldn't focus on a
4 document that talks about residential shingles
5 necessarily. In here I may reference that because it has
6 something about wind but -- but this is not a -- a shingle
7 roof. It's a metal roof. So -- so, that would be the
8 reason I would do that. Also, the building codes, we
9 al- -- I am licensed as a building code official. And I
10 teach for the International Code Council. So, I would
11 then look up and verify that the codes that were in place
12 at the time of the loss are listed in this particular
13 document.

14 Q. Do you have all the documents that you have
15 listed in section -- I'm looking again at Auburn, which
16 I'm gonna go ahead and mark the Auburn -- your Auburn
17 report as Exhibit 1. All the documents that are
18 referenced, you actually have the copies or digital copies
19 of those documents?

20 (Exhibit 1 marked)

21 A. Yes, I believe we submitted those to you in the
22 document section. The only thing we would not have
23 submitted would be the Haag Commercial edition book which
24 we have, and we would not have given you copies of the
25 eight or nine hundred pages for each one of the building

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1 codes. But, yes, we have -- we have copies of all those.

2 Q. (By Mr. Andis) Okay. Because I only got -- I
3 believe I only see three documents in -- it's from your
4 reference section. One was the -- the metal roofing
5 manual. One was the Koontz article and the other was ASTM
6 E1514-98. Everything else we did not get. But you have
7 all that and you can produce that?

8 A. Oh, absolutely. Oh, yes.

9 Q. The Google Earth photos that appear in your
10 report, who -- who found those and picked those photos to
11 include?

12 A. That probably would have been staff, you know,
13 Ryan, my son Jim or Adam. And we use the Google Earth
14 photos simply for the purposes of looking at the
15 surrounding terrain for the wind exposure or the wind
16 blown down the building.

17 Q. And you got -- in Auburn you got a couple of
18 photos of the before and after photo of the storm of the
19 Auburn property. And then on another page you actually
20 have sort of a -- a -- appears a zoom-out view that shows
21 the property in relationship to a, I don't know, 5-mile
22 radius. I'm just curious why you would pick a before and
23 after photo of the storm of the property?

24 A. We always do that just to show the terrain. We
25 don't use Google Earth or any pictorial pictometry photos

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1 for assessment of the building. They're not reliable for
2 that, in my opinion.

3 Q. And as far as the -- do you know for a fact that
4 the Google photos are actually taken before or -- and
5 after whatever the date is?

6 A. Well, no. And that's the problem with all Google
7 photos. The metadata on the Google photos cannot be
8 confirmed. In researching this, Google actually uses
9 about five or six third-party entities to take photos for
10 them. And, then, they assign these dates to them. So,
11 there's no way validating that those are accurate at all.
12 So, we're just putting on there what Google said. But
13 there is no way to confirm that.

14 Q. All right. So, even though you have a photo you
15 claim is dated April 22nd, 2017, on Page Brabo 2068, you
16 don't know that that is actually a 2017, April, photo of
17 the building?

18 A. Yes. Or the -- or the June 28th, 2017, after the
19 storm.

20 Q. Okay.

21 A. And, again, as I want to be clear, we did not
22 rely on -- you can certainly ask Johnson this, but we
23 did -- I did not rely on any of this for formulating my
24 causation analysis, these photos.

25 Q. So, the staff would have been responsible for

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1 locating and docking in the photos. What about the
2 structural information, section 2, who would have
3 researched and put that together?

4 A. That would have been done on a Internet search
5 going to the Web site if available from the city.
6 Sometime this information will have the size of the
7 building, when it was built, those kinds of things. As
8 far as the surface roughness category, I would have
9 assigned that, Johnson and I would have talked about that.
10 I have specific training as a code official in that
11 particular issue. And that has to do with the wind load
12 affect of the building versus the wind speed that may
13 occur on any given day.

14 Q. All right. And -- but in terms of who pulled the
15 information to describe the structure in section 2.1,
16 would that have been you, Mr. Johnson, someone with your
17 staff?

18 A. No, that would have been me.

19 Q. Okay.

20 A. If I can, sometimes that will be inserted by
21 staff as boilerplate where -- and then -- but they'll
22 in -- they'll put in the -- when the building was built or
23 when ownership bought it. The key point is really the
24 last sentence, the surface roughness. There will be lots
25 of times I'll receive a draft document. It'll say surface

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1 roughness B. And I will look at these photos. And based
2 on my own inspection of the property when I was there, I
3 would then determine that no, this does not qualify as B.
4 It's a C.

5 Q. With respect to the roof observations, section 3,
6 who would have researched and written that part or who
7 did?

8 A. Yes, so, the roof observations, I -- I visited
9 the site about three weeks before we were retained on this
10 to do a scoping visit on all of these properties. And
11 based on that inspection, determined that yes, there was
12 damage there, both wind and hail damage. And so, the
13 inspection was then done by two of my staff. So, these
14 guys actually did the -- the full boots on the ground
15 inspections. So, this would have been information from
16 their field notes; and these are their photos.

17 Q. The site inspection that you had three weeks
18 before you were retained, did you take any photos from
19 that inspection?

20 A. No, I typically don't take any photographs when I
21 am being -- when I am scoping because I don't know if it's
22 even going to go forward or not because there is obviously
23 the issue of, number one, when I get there, is there
24 damage. Yeah. Am I going to report that, yeah, I think
25 there's damage here. You probably should make a claim.

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1 Or, secondly, if I do see damage, is the client going to
2 be willing to retain us based on what we think we need to
3 be paid to do the proper inspection. So, I don't want to
4 create any digital trail to that information; and that is
5 my practice.

6 Q. What about field notes? Do you take any field
7 notes when you're there scoping?

8 A. No.

9 Q. Do -- are you doing this on you your own dime or
10 are you being paid to do that initial visit?

11 A. Sometimes we charge, you know, like 500 bucks for
12 a building to get up and take a quick look at it. In this
13 particular case in was actually in Laredo looking at some
14 other buildings from this same storm event in the same
15 complex. I don't know if you've been down there, but this
16 complex is -- these roofs you can stand on, and if you
17 look the right direction, you can see Mexico. There is
18 probably 60, 70 warehouse buildings in a -- in a 1- to
19 2-mile radius. So, I was looking at some other ones.
20 Mr. Lundquist had heard that I was going to be there and
21 gave me a call and said, "Hey, do you have time to look at
22 these other ones?" And I did. So, I did it on my dime.

23 Q. What -- what date were you down there?

24 A. July 22nd, 2019, that week.

25 Q. Okay. So, you were there the whole week?

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1 A. Yeah, I -- I looked at another property called
2 Tri Investments for the Raizner firm. And I can't
3 remember if I looked at some other ones or not.

4 Q. Have you been back to the property since that
5 July 22nd scoping visit?

6 A. No, I haven't. I certainly would have liked to.
7 But with COVID, traveling and going back to places is --
8 is not something that I'm comfortable doing. I know
9 Mr. -- Mr. Johnson was there last week. He and I talked a
10 number of times on the phone about what he was seeing.
11 And I reviewed the photos that he took in preparation for
12 this -- this deposition. I don't know -- I didn't send
13 you those photos. They are in my possession. I'm
14 assuming that he sent those to you as part of his -- his
15 disclosures.

16 Q. Are you talking about the photos received from
17 B.J. on 9/15 -- or that were taken on 9/15/20?

18 A. Yes, those would be the ones, yeah.

19 Q. Okay. Was that Mr. Johnson's first trip to the
20 buildings?

21 A. Yes.

22 Q. And then the -- the gentleman that went down I
23 guess in October of '19 and took the photographs, who were
24 they?

25 A. Scott Documb and Gavin -- I'm having trouble

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1 remembering Gavin's last name -- are the two that went
2 down for us.

3 Q. Scott Dothum [Sic]?

4 A. Yes.

5 Q. And, then, I'm sorry, who was the other
6 gentleman?

7 A. Gavin and I -- I'm just -- I can't remember
8 Gavin's last name. I'm sorry.

9 Q. Okay. So, there's a -- there's some initials
10 that are referenced as attached to some of the photos.
11 You got initial "G" as in golf, "D" as in delta.

12 A. Yes.

13 Q. Is that -- is that Gavin?

14 A. Yeah, Gavin Davis, I believe, yes.

15 Q. And then there is a SRD, serial, romeo, delta.
16 Do you know who that is?

17 A. Yeah, that's Scott Documb.

18 Q. Okay. And B.J. will be Brian Johnson?

19 A. Yes.

20 Q. And then another name I've -- or initials I've
21 seen, I'm not sure I've seen in this one or other reports
22 of yours, KJS, kelo, Juliette, Sierra?

23 A. That would be Kevin Stankey from our
24 organization. Yes.

25 Q. Okay. One of the invoices that we received in

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1 the production said that there are actually four
2 inspectors going. Apparently y'all were doing several
3 numerous properties, like eight properties on this same
4 trip in October. Do you know who the four would have been
5 if it -- if -- we've got photos from Scott, Gavin. Do you
6 know who else would have been with them and what those
7 guys would have been doing?

8 A. Eric -- Eric Lansdown and Jeremy Lansdown,
9 they're both Texas boys. They -- they likely would have
10 been involved in these inspections as well.

11 Q. Do you know what? This -- this might make it
12 easier. I don't know if they did this on purpose or not,
13 but I've got some photos where these -- some of these guys
14 show up either in a reflection or they actually got -- got
15 photographed. Can you see that, the -- the picture, that
16 window?

17 A. Pull that up just a second.

18 Q. Sure. And I'll zoom in a little bit here.

19 A. Yes, I do.

20 Q. Is that -- do you know who those guys are?

21 A. That's Kevin with the -- in the -- in the closest
22 one, that's Kevin Stankey.

23 Q. Okay.

24 A. The guy walking with his back to us, probably is
25 Jeremy Lansdown.

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1 Q. Okay.

2 A. If it's one of our employees. He wears his
3 glasses up like that sometimes. And the guy with the hat
4 is -- is Gavin.

5 Q. All right. And then I've got, I believe, a photo
6 here of somebody, yeah, taking a picture in a white shirt.
7 You see that?

8 A. Yeah. That's Scott Documb.

9 Q. Okay. So, that's -- that's probably the four
10 that were referred to in the invoice, Eric, Jeremy, Scott
11 and Gavin?

12 A. Yeah.

13 Q. Okay. And then I've got one more here.

14 A. No, you -- you said that wrong. You said Eric,
15 Jeremy. Jeremy, Kevin, Gavin and Scott.

16 Q. Jeremy, Kevin, Gavin and Scott. Okay.

17 A. And this is Kevin in the photo just put up.

18 Q. That's Kevin in the photo. Okay. And then if
19 that photo was taken by SRD, that would have been Scott
20 and Kevin on the roof?

21 A. Yes.

22 Q. Okay. All right. Like I said, I don't know if
23 they did that on purpose, knowing we'd be talking about
24 them.

25 So, the roof observations -- and then under

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1 roof observations, there is a section on rooftop damage.
2 I'm back at your report now. It's section 3.1. Is that
3 something that you would have written?

4 A. Yes.

5 Q. Okay. Now --

6 A. No, this would have -- this would have been a
7 combination, excuse me, of their field notes, my own
8 observations when I was there. I saw this oil canning,
9 for example, severe oil canning. I would have been the
10 one that would have labeled "severe oil canning and panel
11 shift" underneath the photo.

12 Q. So, you would have provided the captions on all
13 the photos or just some of them?

14 A. All of them.

15 Q. Okay. And then there were field notes that
16 the -- that the guys brought back along with the photos
17 that you used in putting your report together?

18 A. Yes. And those should have been Dropboxed or
19 given them to you in document production. If they're not,
20 I can locate them.

21 Q. Yeah, I don't -- if you tell me what folder they
22 would have been in and maybe I can --

23 A. It would have been a separate photo called field
24 notes. So, I'll make a note here.

25 Q. Yeah, I don't have any field notes.

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1 A. All right.

2 THE VIDEOGRAPHER: This is the vid tech. I
3 just wanted to say a Brian Johnson is joining us.

4 Q. (By Mr. Andis) All right. So -- and after the --
5 there is a section -- after 3.1, there is a section called
6 3.2 called infrared scanning of the roof. Who would have
7 quote that section, written that section, put together?

8 A. It could have been any one of the four.

9 Q. Okay. Not you, though?

10 A. Well, they took the photos. I'm the one that
11 analyzed the photos. I have specific training in
12 infrared -- analyzing infrared photos. It's in my CV. I
13 was actually trained by the Department of Energy, the U.S.
14 Department of Energy, back in the 80s on how to analyze
15 infrared photos. So, I would have been the one that
16 looked at these photos much like a doctor looking at an
17 X-ray and diagnosing what I'm seeing.

18 Q. Does that training mean that you are IR
19 certified?

20 A. The certification was not available back then.
21 But I certainly could be IR certified if I decided to the
22 money to do it.

23 Q. Sure. So, you're -- you're trained but you're
24 not certified currently?

25 A. Correct. You know, honestly, counselor, there

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1 may have been some certification with it back then. I
2 just don't -- I don't have any certificates to back that
3 up, so.

4 Q. Section 4.0, exterior observations, who drafted
5 this section?

6 A. Well, the observations would have been off of
7 field notes. And then review of -- of photographs and
8 again my own inspection there. So -- but I would have
9 labeled the -- so, in terms of the labeling of the photos
10 where it says overview of front left elevation and
11 overview continued, page 21 of 35, that would have been
12 something a staff person would have put in. But it would
13 have been in yellow. They would have -- they could have
14 easily acclimated those photos. So, I wouldn't have
15 worried about that. But the labeling on 22 of 35, the
16 bottom two photos, I definitely would have labeled those.

17 Q. And then in terms of writing that -- the
18 narrative in that section, that would have been you --

19 A. Yeah.

20 Q. -- in 4, section 4?

21 A. Yeah.

22 Q. -- exterior? Section 5, interior observations,
23 who prepared that section for you?

24 A. This would have been -- this would have been off
25 of their fields notes, and it would have been consistent

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1 with the time when they inspected. When I walked through
2 these buildings, I can't tell you, for example, on page 24
3 of 35 those ceiling tiles. If that was the condition when
4 I was there -- because I didn't take any notes or photos,
5 but I did see ceiling tiles that had water stains on them.
6 And according to the -- and I didn't talk to anybody when
7 I was there. But according to our people and their
8 conversations with -- with staff, they -- they actively
9 were replacing ceiling tiles if they got stained. So, I
10 can't tell you with that photo if that was leaking from
11 after I got there or as a result of the storm.

12 Q. So, you -- you had some conversation with some of
13 the occupants when you were at the property in July of
14 '19?

15 A. No, I did not. There were ladders available for
16 me at each property. I basically poked my head in and
17 said, "Hey, I'm here."

18 And do we need -- "you need somebody to tour
19 with you?"

20 I said, "No." Got up on the sites. It's
21 not a heavily guarded site. So, I was able once I got
22 done to just walk through the building. Nobody asked me
23 what I was doing. It was very interesting. I was able to
24 observe and then go to the next site.

25 Q. But, I mean, you didn't get any information about

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1 leaks or property condition from any of the occupants
2 during your visit? You didn't have -- get any of that
3 information at that time?

4 A. No, not at that time. Later we did, as you know,
5 receive a leak report. And that's referenced, I believe,
6 in our documents received.

7 Q. All right. And the reason is is because if you
8 did, I'd like to know who you talked to. So -- but if you
9 didn't talk to anybody, then we can -- we can move on.

10 A. Yeah, we can move on because I didn't. And I
11 purposefully didn't do that in this -- I try not to in a
12 scoping visit. Then there are some that we do where
13 people want to share information and I specifically ask
14 them not to. That's not the purpose of that visit at that
15 point. That -- and I say "Save that information. We'll
16 interview you later." So.

17 Q. The -- well, did that happen? Did you guys
18 interview or did the four guys that were down there do any
19 interviews?

20 A. Yeah, my understanding is that they did, that
21 they talked with the -- and I can't -- I don't have the
22 names in front of me right now and I don't -- that would
23 be in our field notes with regard to that.

24 Q. So, interviews that would -- those people would
25 be identified in field notes?

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1 A. They might not be identified. I will tell you
2 that's not a great -- that's a -- that's a -- something
3 that we're not great at sometimes is getting the name
4 down. We're trying to get better at that. So, they may
5 not be. Just a second. I'm going to take a peak at --
6 I'm going back up for a section. We have a section --
7 yeah. So, there is a section 2.2 on page 12.

8 Q. Yes, sir.

9 A. That would have been about as much information as
10 we typically put in a report. So, this is an indication
11 when I read 2.2 that, yes, we did interview some people.
12 We would not put a sentence in that says many of these
13 repairs were made at the expense of the owners without
14 having been told that or seen some documentation to -- to
15 that. So --

16 Q. And -- and -- and you're saying that the --
17 whoever the inspectors talked to when they were down there
18 in October, those may or may not be identified by name
19 in -- in the field notes?

20 A. Correct.

21 Q. All right. We were looking at -- I think we're
22 up to windows. Well, first of all, the -- the captions on
23 the interior, obviously overview, not a big deal. But
24 when you start getting into some substantive captions,
25 water damage to ceiling tile, water damage to

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1 installation, did that come from you or would that have
2 been picked up from field notes or photographs?

3 A. That would have come from me. I mean, I'm -- I'm
4 looking at a -- I'm looking at a photo. I'm seeing water
5 damage on a ceiling tiles. And that's what I'm noting.

6 Q. Okay. Obviously you're not noting the source of
7 that water damage, you're just saying, hey, this is water
8 damage on the ceiling tile?

9 A. Correct.

10 Q. And 5.2, the window damage section, who would
11 have prepared that part of the reports?

12 A. I would have prepared that part of the report.
13 That was specific. I have a -- you'll see it on my CV. I
14 have a pretty substantial background in -- in fenestration
15 failure, design installation, done a lot of window testing
16 over the years and have worked for and consulted for
17 various window manufacturers. So, I focus a great deal
18 when I'm on these projects and there is wind involved at
19 possible damage caused by wind to windows and in
20 particular a storefront glazing window like this, which is
21 quite frankly not very robust. And so, what I was seeing
22 when I was down there was damage to these windows from
23 window path, what -- and I asked these guys specifically
24 to document some of that.

25 Q. All right. Then 6.0, the -- the portion in the

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1 reports that deals with the Stolk Labs report, I don't
2 know that there is any analysis in that section. It seems
3 to be more just copying and pasting into your report; is
4 that right?

5 A. Yeah. And I think the reason for that is just
6 the point that we are -- we are relying on Stolk, I
7 believe Johnson and myself both. You can ask him that
8 question. But we are relying on Stolk. We did not do our
9 own -- own analysis of that. So -- and I think, you know,
10 my opinion is what Stolk is telling us is that we have --
11 we have damage, physical damage to -- to these metal roofs
12 from the hail and that we have -- that that is relat- --
13 that is causing functional damage.

14 Q. Have you had any contact -- I think this is --
15 with David Stolk or his dad with respect to this matter --

16 A. No --

17 Q. -- since the report?

18 A. -- I've never met them before.

19 Q. Okay.

20 A. No, I don't know who they are.

21 Q. And you haven't gone over to the lab or been to
22 their lab in -- I guess it's in Richardson?

23 A. No.

24 Q. So, other than what the report -- what's in the
25 report, you don't have any outside information from the

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1 Stolks concerning their analysis of -- of the cuts from
2 the roof?

3 A. No. I -- and, in fact, I'll -- I'll go one
4 better. I don't really know -- I don't know what their
5 qualifications are either. I just don't know. I haven't
6 interviewed them. I don't -- I don't know who they are,
7 so.

8 Q. Then we have the section 7, causation statement.
9 Who prepared that section of the report?

10 A. So, this would have come -- this would have been
11 in red when it came. And so, I would have gone through
12 and prepared this statement initially or Johnson may have.
13 I can't remember. But this would have been a
14 collaborative effort. And in particular what's -- what's
15 important is the -- just a second. Yeah, we referenced
16 Stolk. Yeah, this would have been done -- this kind of
17 tries to tie in the entire report above this together as a
18 kind of a conclusory statement on causation. So, this
19 would have been done with Johnson or myself.

20 Q. So, you don't know if you started the draft or he
21 edited it or vice versa with respect to this?

22 A. Well, the way it reads it -- it looks a lot like
23 my writing style. So, I'm guessing I -- I probably put
24 the majority of this together initially. Johnson -- like
25 7.2, Johnson would have been more into compression and

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1 bending of fasteners, some of the wind -- I mean I have
2 training as a building code official. I mean, I know, for
3 example, that when this building was built in 2000 and
4 2001, it would have been done under the -- probably the
5 1995, even maybe the 1994 UBC codes. And the design for
6 that would have been about 90 miles an hour for this roof,
7 this type of a roof assembly.

8 I also know that that design back then only
9 focused on designing and so the roof wouldn't blow off.
10 It wasn't -- it never took a look at what we call subtle
11 movement, panel shift, opening at disassembling materials,
12 the flashing joints, which will cause leaks. So, we focus
13 now on that in the building codes specifically; and that
14 would not have been an area of focus. So, I would expect
15 that if we had winds in excess of 90 miles an hour, this
16 roof, while it wouldn't have folded off and blown off
17 necessarily, it certainly would have been enough to create
18 opening.

19 Q. Anything else about the drafting and editing of
20 7.0 like which sections maybe you wrote, which sections
21 maybe Mr. Johnson drafted?

22 A. No, it's --

23 Q. Did you draft the --

24 A. -- I think it's collaborative.

25 Q. Okay.

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1 A. Yeah.

2 Q. All right. So, you -- maybe you primarily
3 drafted it and he added or tweaked some things along the
4 way?

5 A. Yes.

6 Q. All right. When we -- when we start going
7 through it, if -- if we're going through a section and
8 you're like I didn't write that, you'll have to ask
9 Mr. Johnson, feel free to bring that up as we go through
10 it today.

11 A. I will.

12 Q. And, then, section 8, conclusions, who would have
13 drafted that section?

14 A. I -- I would have done 8.1 and 8.2 in the
15 drafting. Well, we have two -- we go from an 8.1 to an
16 8.2 and then we have another 8.1. Sorry about that. It's
17 kind of numerical thing so. The second 8.1 would have
18 been collaborative with Johnson and I. He's a big -- I
19 know he's on the line here. He's kind of a nerd with
20 technical reports from manufacturing associations,
21 manufacturers, those kinds of things. So, the MCA roofing
22 installation manual circa 2014 would have been and -- and
23 this definition of damage to a metal roof would have been
24 something that he typically would have captured. He would
25 have been the one talking about the ductile affects of

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1 metal in terms of impacts. I would have drafted 8. -- the
2 second 8.2. Sorry for the numbering on that. So, yeah,
3 that's -- that's how -- that's how section 8 would have
4 run.

5 Q. 9.0, I take it that's your section?

6 A. Yes. But -- yes, but he would have reviewed it,
7 yes.

8 Q. But, I mean, you drafted it and then he -- would
9 have been subject to his review?

10 A. Yes.

11 Q. And then the requirements, recommendations, is
12 that yours also?

13 A. Well, it is but he and I have worked on this
14 before, this issue of, okay, we've got -- we've got draped
15 insulation that is installed. In the installation
16 process, it's installed over the purlins. And then the
17 roof is compressed down over that. And so, when we have
18 to replace a roof like this and the insulation, we have to
19 create some type -- we have to deal with getting enough
20 energy coat insulation in there. And so, there's really
21 only two ways we can do. We can try and add it below.
22 The problem here is I have sprinkler heads that are within
23 about 3 inches of the current insulation. So, all the
24 sprinkler heads in the building would have to be relocated
25 which would cost more than what we're proposing here,

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1 which is to create a space above the purlins with a
2 stanchion or a raised ledge, if you will, and then the
3 roof would be fastened to that. And that would allow for
4 that space for the new insulation. That's pretty standard
5 design now with buildings like this. So, it's a retrofit
6 option.

7 Q. All right. So, you're talking that the -- that
8 it's a code requirement that the -- I guess the isoboard,
9 the 3-inch isoboard be added in case the roof was redone?

10 A. Yes, it's a -- it is a code item. And we --
11 that's just -- that's gonna have to happen. This is a
12 conditioned space. That's the problem. So, we have
13 warehouses like this, you know, that are not conditioned,
14 don't have any insulation so we don't have this issue.

15 Q. You're saying that both of these buildings are
16 conditioned spaced?

17 A. Yeah, they're designed as conditioned space with
18 the insulation, yes.

19 Q. And without, if there is no conditioned space
20 then the code would not apply, right?

21 A. Agreed, yes. And in particular Item No. 5 would
22 have been mine on the scope. We -- we -- as a code
23 official, you are trained that there are always
24 alternative techniques that can be looked at. So, if
25 somebody can come up with an alternative on how to meet

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1 that energy code requirement and it is tested by a
2 third-party testing agency and it is approved by the
3 building code official that it meets the minimum
4 requirements of that code, then that could be done. We
5 haven't found a technique yet to meet that -- that burden.

6 Q. Mr. Irmiter, how many times have you worked on a
7 matter for Mr. Lundquist?

8 A. I think this is our -- well, considering this is
9 eight properties here, I think, but this is -- considering
10 this just one -- we consider this one matter, I think it's
11 probably seven, seven times or so. We did some Corpus
12 Christi stuff for him after Harvey.

13 Q. Was that when you started working for him was
14 after Harvey or had you done some work before that?

15 A. No, that was -- that was the first. He's from
16 Corpus and so that was the first time we had -- we had
17 met.

18 Q. All right. So, you said, I'm sorry, seven
19 matters, including this one?

20 A. Yeah, seven or eight. It's not a -- it's not a
21 large number.

22 Q. And this one you would consider the eight
23 properties as one matter?

24 A. Yes. Yes.

25 Q. All right. So, total number of properties, if we

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1 could break that out into seven or eight matters, how many
2 properties?

3 A. Probably 20 property locations.

4 Q. And have you read reports for him in all of those
5 matters?

6 A. Yes.

7 Q. About how much have you made from -- or been
8 billed to Mr. Lundquist over the years on these matters in
9 total?

10 A. That's -- I'm not gonna answer that question.
11 We're a privately held corporation. So, that is not
12 public information.

13 Q. I understand. But -- and we have a
14 confidentiality order in place in this case if we need
15 to --

16 A. You can -- you know, I'm just not gonna answer
17 it. You can certainly, you know, subpoena us for that and
18 our attorneys up here will quash that like they have every
19 other time, but I'm not gonna answer that question.

20 Q. So, you're not -- let me just make sure I have
21 the record clear: You're refusing to answer the question
22 as to --

23 A. Yes.

24 Q. -- how much money your company has been paid by
25 Mr. Lundquist in the years that he has hired you to do

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1 work for him?

2 A. Absolutely not.

3 MR. LUNDQUIST: And I'll also object as
4 overbroad, irrelevant and, yeah, that there's no court
5 order compelling that.

6 MR. ANDIS: Well, given the history in this,
7 Will, I'm -- I'm a little surprised that -- that this is
8 going on this way. So --

9 A. Counselor -- counselor, I answer that question
10 every -- I answered that same question on Monday. That
11 has been my standard line. 500 depositions, no one yet
12 has ever been able to gather that information. I'm not
13 doing anything that I haven't already done every time that
14 question is asked, so.

15 Q. (By Mr. Andis) I understand what you're saying,
16 sir; but there have been developments in this case where
17 Mr. Lundquist has requested and received that information
18 from United Fires.

19 A. Okay. That's fine.

20 Q. So, I think that -- I think we'll just have to go
21 down that road.

22 And then in terms of how much have you
23 billed in this case?

24 A. I think we did each property for \$6500 if I
25 remember right. So, I think these two properties would

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1 have been 13,000. And we did send you over the agreements
2 for these two properties; and we sent you over, I believe,
3 the paid invoices. There would have been an interim
4 payment in between that for travel expenses, but I believe
5 that's it.

6 Q. Any moneys outstanding or due and owing today
7 other than the deposition prep and deposition time?

8 A. No, there is nothing owing at this point.

9 Q. And then if you are called to trial, your same
10 rates that you charge per deposition would be your trial
11 rate?

12 A. Yes. We typically do trials either on a set
13 price or -- or base it on that hourly rate. It just
14 depends. But it's generally the same -- the same process.

15 Q. All right. The five -- I think I saw a
16 5,000-dollar rate for what was called a phase one and a
17 1500-dollar rate for the actual written report. Is
18 that -- that's the agreement that you have with
19 Mr. Lundquist?

20 A. Yes, that would be the 6500.

21 Q. All right. Is that a -- is that a special rate
22 for him, or is that the standard rate you charge to --
23 with all your clients for those two types of phases, I
24 guess?

25 A. Well, I guess I'm a capitalist like anybody else.

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1 We -- we -- we -- we charge all of our clients what we
2 believe is a fair rate. It would be the same rate I would
3 charge the insurance carrier if they wanted to hire us on
4 this, so.

5 Q. I asked you earlier about depositions. You said
6 about 5 percent of the depositions you give now are for
7 insurance company clients. Do you -- when was the last --
8 or in this -- in 2020, how many cases do you have that you
9 are actually hired by the insurance company?

10 A. I have to think about this. So, we have one -- I
11 think we probably have two or three in 2020.

12 Q. And they -- what kind of claims are these -- are
13 those?

14 A. One is a slip and fall. One I believe is a
15 construction defect where we are representing a -- one of
16 the subs. And I can't remember the third one, if -- if
17 we're -- oh, I think it's a sub- -- well, it's a
18 subrogation claim. It's a wind and hail claim in Colorado
19 on about 60 condominiums. And it's -- I think you're
20 going to see more of these. It's interesting. The --
21 it's the -- it's the hail resistant shingle that was
22 marketed by one of the single manufacturers. That's all
23 I'll say. And the hail that fell was below the level that
24 they say this should not cause damage, and it trashed all
25 these shingles, so.

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1 Q. Let me be more specific. With respect to your
2 insurance company work, have you done any work for
3 insurance company on a first-party property claim?

4 A. Let's see.

5 Q. And the insurance company hired you to give
6 expert opinion on -- on their behalf against the property
7 owner.

8 A. No, I don't think so. I -- they -- they don't
9 like me very much for some reason.

10 Q. So, the -- the -- the insurance work you're doing
11 is usual- -- is either a third-party liability claim or a
12 subrogation matter?

13 A. Typically, yes.

14 Q. Okay. The -- the four gentleman that were --
15 went to Laredo in October, did they -- are they employees
16 of Forensic Building Science or they're independent
17 contractors?

18 A. No, they're employees. They were at the time.
19 Scott Documb I will tell you is not -- no longer with us.
20 He left in, I think, January of this year.

21 Q. How do you spell his last name?

22 A. I -- I can't remember. D -- D-O-C-U-M-B, I
23 believe.

24 Q. What was Mr. Documb's training?

25 A. He actually was a building code official in Waco,

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1 Texas for a while, a building code official in Iowa and he
2 lives in Davenport, Iowa. That was at least the last --
3 last place he lived when he worked with us.

4 Q. And then Jeremy's qualifications, what is his
5 qualifications?

6 A. Yeah, Jeremy worked for an insurance carrier in
7 Waco as a claims rep and I think for about ten years. He
8 may even still have his license in place for that. He
9 joined us two years ago and does field inspections for us.
10 He also now has moved into in January of this year,
11 director of our business development. So, that's his
12 main -- main focus. But in these times of COVID because
13 of travel restrictions and a lot of work that we do in
14 Texas, he's out doing a lot of field work as well now.

15 Q. Is he and Eric related?

16 A. Brothers, yes.

17 Q. Okay. And Mr. Lansdown, does he live in --
18 Jeremy -- does he live in Texas?

19 A. Yes, they both do.

20 Q. Okay. Do you know if he's a public adjuster?

21 A. No. We don't have any public adjusters on our
22 staff.

23 Q. Why not?

24 A. Why would we?

25 Q. I'm just asking you, sir. I mean, to --

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1 A. We're causation people. We're not tied to the
2 outcome. I don't want to be tied to the outcome. But we
3 work with public adjuster aves. But that's just a
4 different niche, so.

5 Q. And, then, Gavin Davis, what are his
6 qualifications?

7 A. So, Gavin actually lives in Puerto Rico. He --
8 he's one of our -- we've done a whole bunch of projects in
9 Puerto Rico. And we had up to 20 employees on the Island
10 when we were fully inspecting down there. We retained
11 him. Gavin has a number of skill sets. He's -- he's
12 Xactimate Level 3. He's got some building code training.
13 He's got a lot of construction experience. He's IR
14 certified. Let's see. He's cert- -- he's got a couple of
15 certifications for fire investigations. Yeah, he's --
16 he's just got a bunch of different skill sets, so.

17 Q. And then -- let's see, oh, speaking of Xactimate,
18 I did not see any ESX files in the document production.
19 Do you have those?

20 A. We do, and we can certainly give those to you.

21 Q. All right. All right. Would you please add that
22 to the list of the --

23 A. Yeah.

24 Q. -- deferred notes as the ESX files? Okay.

25 A. I will.

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1 Q. And then Kevin I think is the last one I came
2 down. What are his qualifications?

3 A. Yeah, Kevin Stankey joined us. He's one our --
4 he's been here one of the longest. He worked for State
5 Farm as a field adjuster, as a CAT adjuster. And really
6 was starting his family and wanted to be home more. So,
7 he joined us and has been climbing roofs and buildings for
8 us for probably, what, seven, eight years now. He's also,
9 I believe, Level 2 or 3 Xactimate certified. But he does
10 a lot of our field work. But he also drafts reports and
11 estimates.

12 Q. And who did the Xactimate estimates in -- in this
13 case?

14 A. For -- these were done by Michael -- well, I did
15 the Xactimate estimates. Michael Gregory is a Level 3
16 Xactimate. He's -- he runs our office in Louisiana. So,
17 Michael Gregory did the data entry; and then those came to
18 me. And I made changes, clarifications. Sent those back.
19 I'm also trained in Xactimate. I just don't sit at the
20 computer and do data entry.

21 Q. So, the initial, I guess, filling out of -- of
22 all the various items would have come from Mr. Gregory.
23 And you would have reviewed it and revised it if
24 necessary?

25 A. Well, yes. An example and I'll give you a very

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1 specific example of that review process: Xactimate does
2 not have as we currently sit and we have talked to them
3 about this and offered to assist them in putting this into
4 their database. The reason we offer it is I was actually
5 one of the first people when I was -- when I had my
6 contractors business to help Xactimate back in the '80s
7 and '90s with some of the initial databases that they put
8 together. They don't have line-item pricing for this idea
9 of putting stanchions and raising a roof up on a metal
10 building. We've had bids from that over the years from
11 contractors. And so, we -- we have to manipulate by
12 adding additional insulation to get that -- that number.
13 And we can talk more about that line item on the estimate.

14 Q. And -- all right. So, when you came down in
15 July, you went to both Auburn and JEF or were you only
16 able to hit one of the properties?

17 A. I hit all -- I hit all eight properties.

18 Q. So, you went to the other properties as well?

19 A. Oh, yes.

20 Q. All right. And you didn't charge for that time
21 in any of those -- in -- with respect to any of those
22 properties?

23 A. Well, I think it was reflected in our -- I
24 wouldn't say I didn't charge. I didn't charge initially,
25 but we -- we recouped those costs.

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1 Q. Well, the only expenses I think I saw were just
2 the ones for the four gentlemen coming and doing an
3 inspection in October. Were there -- was there another
4 expense invoice that was sent out for those initial
5 scoping?

6 A. Well, you're -- I think you're -- you're trying
7 to put a fixed price agreement of \$6500 into an hourly
8 matrix. That's not how we do things. We don't bill
9 hourly. We don't keep track of time cards. So, I go
10 down. I look at these. And I send Will pricing based on
11 yes, I think you should proceed forward with having us do
12 full inspections on them. Here is the price. He agrees
13 to that price.

14 Q. All right. And that price --

15 A. And that -- that price -- that price assumes that
16 I'm gonna capture some of my costs that I've already
17 incurred.

18 Q. Is there a particular file number associated with
19 these eight cases or does each building have its own
20 identifying number at your company?

21 A. Yeah, each -- each -- on our -- the way that we
22 store our data -- now on the Cloud, we have a specific
23 property address and each address has its entire subfile.

24 Q. And does that subfile have like a unique internal
25 number like so that you -- you can code it or invoice it

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1 properly?

2 A. No. It just has a prop- -- we do it by property
3 address.

4 Q. Okay. So, for example -- and this may not be
5 apples to apples. But in the documents that were produced
6 by your company before the depo, there was a -- some files
7 in the photos that are called Brabo International dash,
8 and it has the address and then it might say something
9 like "inspection photos" with a date and somebody's
10 initials? Is that sort of the nomenclature that you use
11 to identify files related to a certain property?

12 A. Yes. So, those would all have been put into --
13 so, in that -- in this particular case, this address would
14 have in its subfile -- which we sent to you -- it would
15 have been a "from client" file. It would have ideally
16 field notes. It would have photos, the raw photos that
17 were taken for that inspection, including any IR photos.
18 It would include the -- the reports, then, the final
19 reports and estimates, including the ESX. So, there's
20 five or six subfiles that are in there.

21 Q. Because I'm not sure I got the IR photos. I got
22 a lot of photos, but I don't know that I got any IR
23 photos.

24 A. Well, we might not have taken IR on this
25 particular building. There was --

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1 MR. LUNDQUIST: They're -- they're in the --
2 not to interrupt you, Tom. I'm sorry. They're -- they're
3 in the photo box that were -- that were produced, David.
4 I'm -- I'm looking at them, just FYI. I don't want y'all
5 wasting any more time on this.

6 MR. ANDIS: Well, I'm referring to the
7 digital, the JPEGs, the actual original digital photo. I
8 don't know that I have any IR original digital photo files
9 like I do from -- like, I guess, SRV and GD. They have
10 JPEGs.

11 Q. (By Mr. Andis) Are there JPEG or something
12 similar in digital form of the IR photos, Mr. Irmiter?

13 A. Yes.

14 Q. Okay. All right. I would ask that you
15 supplement your production with those as well, please?

16 A. All right.

17 Q. And then you mentioned earlier you did not
18 provide the Haag documents but they're on your reference.
19 Can you explain? Do you actually have the Haag documents,
20 or you just looked at them at -- at some point?

21 A. No. Mr. Johnson is -- that would have been an
22 insert that he would have requested. Mr. Johnson is Haag
23 certified commercially. And so, he's gone through that
24 training. And so, he would have wanted that document in
25 there.

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1 Q. All right. So, if we don't have them, it's not
2 because you don't have them. It's just they didn't get
3 produced for some reason?

4 A. Yeah, we have them -- I mean, I have their --
5 because I -- I sent people through both the residential
6 and the commercial Haag training. So, we have all of that
7 documentation. It's not current. It's been a few years.

8 Q. That's fine. Whatever you reviewed or relied on
9 that went into your opinion, I would like to get a copy of
10 it, please.

11 A. Well, can I -- can I ask a favor? We typically
12 do not send out the 800-page per document or more of the
13 building codes.

14 Q. I mean, is it on a -- is it like electronic form
15 or a thumb drive?

16 A. Well, it's --

17 MR. LUNDQUIST: Hang on, Tom. David, I'm
18 not gonna ask this witness to go back through and give you
19 all thousands of pages of reference documents. They're
20 readily -- readily available. Some of these are
21 trademarks. I mean, the Hoskey documents are great
22 example. I feel certain Mr. Spiekerman has access to
23 these as well. And so, you know, we're -- we're not gonna
24 produce hundreds of pages of -- of the livestock that's
25 dating back to 1991.

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1 MR. ANDIS: Just so I'm clear, you're --
2 you're refusing to produce which documents?

3 MR. LUNDQUIST: He's referenced a variety of
4 different documents and they're all readily available for
5 anyone in this industry, including the tabs.

6 MR. ANDIS: Are you saying that any document
7 he has not previously you produced today, he is no longer
8 now going to not produce?

9 MR. LUNDQUIST: No. I'm saying that -- and
10 without a court order, I'm asking him to produce documents
11 dating back to two thousand -- 2012 to 2011 which
12 Mr. Spiekerman should have equal access to, even though
13 they are just reference materials, files that may be
14 printed in -- in hard copy like I've got a bunch of back
15 there (indicating), I'm not gonna ask Mr. Irmiter at my
16 expense to go through and produce all these files to
17 United Fire.

18 Q. (By Mr. Andis) All right. So, all these files
19 don't exist let's say on the thumb drive or on the
20 reference folder on your system that are fairly, easily
21 accessible, Mr. Irmiter?

22 A. In reference to the -- the -- first of all, the
23 ASTMs are licensed. All of the building code stuff is
24 licensed. We -- we -- as a member of ICC Code Council, we
25 pay for that license and we pay for access to those. The

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1 2012s, some of those are going to be digital. Some I will
2 have in paperbound. I've never been asked ever to produce
3 those in a case -- in any case I've been involved in. So,
4 you will be the first that has asked me to copy and
5 produce thousands of pages of codes.

6 Q. And these are all the documents cited in your
7 reports under the section I believe it's 1.9, "the
8 following additional documents were used for referenced"?
9 That's the -- these are the documents you're talking
10 about, right?

11 A. Yes. And the one I'm -- the one I'm strongly
12 objecting to is the building codes.

13 Q. Okay. And -- but the Haag documents you're not
14 objecting to producing those?

15 A. I don't care. I'll send you that, sure.

16 MR. LUNDQUIST: Well, I am. I am. You
17 know -- and so, United Fire wants Mr. Irmiter to -- to
18 gather all these things up. But we can talk about it
19 offline, but I can tell you that I've never had a request
20 like that.

21 Q. (By Mr. Andis) You mentioned that you work with
22 PAs. Did you work with Cord Lago in this matter?

23 A. No, never met the man.

24 Q. Okay. But you did review some of his writings,
25 did you not in -- with respect to these buildings?

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1 A. Yes, we've referenced those as -- as documents
2 that we received and reviewed.

3 Q. Did you rely on any of his -- I guess his content
4 in making your opinions?

5 A. No. Sometimes we might pull a photo that they've
6 taken because they were there before we were, but in this
7 case there was nothing that -- that we couldn't gather
8 once we got there.

9 Q. The first part of your report deals with the
10 weather. And on page 2 of 35, Brabo 2062, I believe
11 we're -- this is gonna be --

12 MR. ANDIS: This is Exhibit 1. And
13 Exhibit 2, just for the record, is the report on JEF.

14 (Exhibit 2 marked)

15 Q. (By Mr. Andis) You pulled -- or someone has
16 pulled NOAA storm events database event details with
17 respect to an 83-knot wind. You see that?

18 A. Just a second. Yes, this is an overview detail
19 of that storm.

20 Q. Okay. Now, the -- the NOAA provides -- they
21 provide a lot more events than just the one that was
22 pulled here, don't they, for the -- for that particular
23 storm?

24 A. Yes, they do. I think there is -- on that date I
25 think there's 25 or 30 events that -- that may -- that

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1 occurred, you know, in that general location.

2 Q. Okay. Well, let me -- let me show you --

3 MR. ANDIS: We'll mark this as Exhibit 3.

4 (Exhibit 3 marked)

5 Q. (By Mr. Andis) This is the storm events database.

6 This shows the -- some additional events that were not
7 picked up in your weather report, right?

8 A. Yes.

9 Q. Okay. And then do you know why --

10 A. I -- I've seen these. I've reviewed these.

11 Q. Sure. Sure.

12 A. Yeah.

13 Q. Why did you focus on the one that you put in your
14 report rather than any of the other ones that are
15 identified in this Exhibit 3?

16 A. It was just an example of what was occurring.
17 When we go to a site like this and somebody tells us that,
18 you know, there's a storm event, we want to look for some
19 definitive source -- and we think NOAA's fairly
20 definitive -- that something occurred at this location --
21 not at this location, excuse me. That something occurred
22 in this area on that particular day. Was there actually
23 an event that was recorded. And this indicates that yes,
24 there was. These are -- and I'm trying to look at this
25 particular one. So, this is the events database, 5/20/17

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1 to 5/21. So, this is only asking for one day. The ones
2 that I searched, I asked for 2010 up until the time of our
3 field inspection, my initial inspection. So, we went back
4 a number of years basically.

5 Q. Sure.

6 A. And when you have to -- if I can, what you have
7 to do with this is you have to then on the -- on the
8 left-hand tab where it says Laredo International Airport
9 you have to click on that and then a map will come up
10 underneath. And then you have to look at that map and
11 this would be a -- an event that is called in by one of
12 three sources, either by then general public, which is
13 considered by NOAA to be less reliable, by a trained
14 weather spotter which is con- -- which is considered to be
15 reliable and by law enforcement which is somewhere in
16 between the middle of those two. In some instances you
17 will have a report from a weather station at an airport
18 and here those first two are at Laredo airport.

19 Q. The reason I'm asking you is because you picked
20 on the report that focuses on 83-knot winds. Is that the
21 reason for isolating the one you did?

22 A. No, not necessarily. Just indicating that to me
23 that in -- that NOAA is saying that in this area, there
24 were winds up to 83 knots that someone reported. What I
25 would need to do -- and let's go back and take a look at

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1 my report so I can refresh my memory here. Just a minute.
2 So, that report is from storm survey, CSV. Yeah, that's
3 for the airport. So, that would be from the -- a weather
4 station.

5 Q. Okay.

6 A. And that would be considered to be very reliable.

7 Q. All right. All right. Is it any more reliable
8 than the other reports that are listed here on Exhibit 3?

9 A. Well, it's the first source that NOAA looks at
10 and it is generally the first source that meteorologists
11 will look at in formulating an opinion.

12 Q. All right. How -- how high were the winds at
13 the -- the Auburn property on May 21st, 2017?

14 A. Nobody knows that specifically. You would have
15 been there that day with an anemometer and measuring the
16 winds. What we have to do is we have to look at this type
17 of weather data. We have to look at the weather data I've
18 already discussed in my report. We have to look at the
19 ground truth investigation and what are we seeing that
20 happened. We know it certainly wasn't robust enough to
21 fold the roof back and peel it off. We don't -- we do --
22 in my opinion it was robust enough to create openings at
23 intersecting joints at flashing locations and put stress
24 on fasteners which caused the leaking.

25 Q. So, you don't have an estimate as to what the

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1 wind speed was at Auburn on May 21st, 2017?

2 A. I think we pegged it at around 90 miles an hour
3 in our report.

4 Q. How about at JEF?

5 A. Excuse me?

6 Q. JEF property, the winds, do you have an estimate
7 of the winds at JEF on May 21st, 2017?

8 A. I think we pegged -- yeah, I think we pegged them
9 both at 90 miles an hour.

10 Q. All right. And the buildings aren't right next
11 to each other, they're kind of separated, what, a couple
12 of miles?

13 A. I think it's less than a mile, I thought.

14 Q. All right. So, 90-mile-an-hour winds. And again
15 that's not based on my measurement, but it's based on your
16 estimation?

17 A. Based on my education, training and experience,
18 yes.

19 MR. LUNDQUIST: So, I'll object to
20 mischaracterizing testimony. Sorry.

21 Q. (By Mr. Andis) There is a -- All right. And we
22 have one report of measured winds at Laredo airport. You
23 see that on Exhibit 3?

24 A. Yes.

25 Q. All right. And you discount that or disregard

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1 that as being a more accurate indicator of the wind
2 speeds?

3 A. Well, that's 83 knots. You have to convert the
4 knots to miles per hour. That's gonna put it up around
5 90.

6 Q. Right. Right. But I'm talking about that was
7 estimated wind speeds, right, the 83 knots?

8 A. Well, no, actually from the airport, I would say
9 that that is probably not estimating. If that is a
10 designated weather station and they have -- that would be
11 an accurate report.

12 Q. Okay. Let me zoom in on this document. I want
13 you to focus on the -- all right. See here under the
14 magnitude column, it's got knots number?

15 A. Yes.

16 Q. And then it says either EG or MG. Do you know
17 what that stands for?

18 A. Estimated.

19 Q. What does MG stand for?

20 A. I'm sorry. Maximum gusts is -- is the MG. EG is
21 the estimated gust.

22 Q. Okay. So, your -- your position is that the
23 letters MG next -- in this NOAA report stand for maximum
24 gust and -- and EG is estimated gust?

25 A. That is my understanding, yes.

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1 Q. All right. So, why would the maximum gust be
2 lower than the estimated gust if that's what it was?

3 MR. LUNDQUIST: Guys, the -- the
4 magnitude -- the definitions are right above. I'm -- I'm
5 not -- I mean, I know nobody is trying to trick anybody
6 here, but they're -- they're really on the top of the
7 page. So, we can -- sorry. Carry on.

8 MR. ANDIS: Please don't coach the witness.
9 All right?

10 MR. LUNDQUIST: I wasn't tricking, David.

11 MR. ANDIS: Let's talk about tricking, Will.

12 MR. LUNDQUIST: The witness is answering the
13 questions.

14 MR. ANDIS: I'm asking the questions. You
15 can object if it's misleading. That's fine. But please
16 don't coach him.

17 Q. (By Mr. Andis) All right. Do you know what MG
18 stands for, outside of what Mr. --

19 A. Magnitude gust.

20 Q. Okay. So, before Mr. Lundquist mentioned that to
21 you, you did not know that?

22 A. Yes, I did.

23 Q. You did know that?

24 A. Yeah, it's in my training. You know what,
25 counselor? I'm 62 years old. I do the best I can to keep

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1 all this stuff in my head. But if you want to kick shit
2 with the cute chickens today, we can do that. But I know
3 it's right there.

4 Q. I just want to know if you know that the measured
5 wind at the Laredo airport on this day was 51 knots which,
6 I think, about 59 miles an hour. Did you see that?

7 A. Yeah, but it wasn't at the Laredo airport. It's
8 at a location in Laredo. So, you would have to click on
9 that blue Laredo, pull up the map and it will show you
10 that was it will also tell you who reported it.

11 Q. All right. And --

12 A. So, I would be -- I would be very interested to
13 see how it was measured.

14 Q. All right. And you did not follow up on that
15 when you were preparing your weather for this -- this --
16 these two buildings, right?

17 A. I did not, no.

18 Q. Did -- let's go back to your -- your report. You
19 have an event narrative that you pulled from NOAA. You
20 see the event narrative? There's an episode narrative and
21 an event narrative?

22 A. Yes.

23 Q. All right. The event narrative is on the bottom
24 of page 2063. It's start damage survey in connection with
25 a severe thunderstorm?

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1 A. Yes.

2 Q. Did you do anything to look at the -- the damage
3 or map this straight line wind path in doing your weather
4 research for this?

5 A. No.

6 Q. Okay. So, you see that it was a straight line
7 wind that was reported to have started in a certain area
8 and extended to a certain area?

9 A. Yes.

10 Q. All right. And you haven't mapped that out. You
11 don't know where that damage path goes in relationship to
12 where the properties are located, I take it?

13 A. Well, no. But I do know that I pulled up a
14 digital mesocyclone signature that was virtually on top of
15 the property that would have been consistent with enough
16 wind damage to cause the damage that I saw there. So,
17 based on that --

18 Q. And we'll get to that. We'll get to that.

19 A. I'm sure we will.

20 Q. I'm -- I'm just wondering if you read this wind
21 damage path and mapped it out and saw what relationship it
22 had to the properties?

23 A. No, not for this particular citing from the
24 airport.

25 Q. All right. Next page on your report is a -- this

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1 is the hail filter, the hail signatures on page 2064?

2 A. Yes.

3 Q. All right. Now, you -- there are -- what is
4 that? Four different hail signature pings or what do you
5 call those little red look like thumbtacks or balloons on
6 this map?

7 A. Well, the blue house is the property based on the
8 coordinates; and these balloons that you see are hail
9 signatures that were reported on that date.

10 Q. So, these are, I guess, returns from the radar
11 that we're seeing?

12 A. Yes. These are not -- these are not called in
13 hail reports.

14 Q. Okay. This is not actual hail on the ground,
15 right?

16 A. No, absolutely not.

17 Q. These are used in -- in the predictive --
18 primarily in a predictive capacity so that weather service
19 can send out alerts as soon as they can if they think
20 they've got something going on that might -- people might
21 need to know about?

22 A. No. This is not predictive, no. You're --
23 you're -- you're misunderstanding. These are issued after
24 the fact. This is not predictive in nature. This is what
25 happened. These are the signatures that were pulled off

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1 of the radar after the affect.

2 Q. Okay. But it's not actual measured hail on the
3 ground, right?

4 A. That is correct.

5 Q. Okay. And you picked up for your hail point one
6 down south. You see that? There's actually three south
7 of -- I guess this is north, south, east, west. So, south
8 of the house. In the picture there's three little
9 balloons?

10 A. Yes.

11 Q. And you picked one which you said was about
12 4 miles away or maybe one of other ones is about 4 miles
13 away?

14 A. Yes.

15 Q. I think the one you isolated there is actually in
16 Mexico?

17 A. Right.

18 Q. All right. So, my question is why did you pick
19 to expand on one of the three south of the property versus
20 the one to the north of the property?

21 A. To show the largest hail that was in the area.
22 All bo- -- all three of those bottom ones are 4 inch. The
23 one up on top is the .75.

24 Q. Okay. And so, why didn't you pick on -- and the
25 .75 is actually closer to the properties than the -- the 4

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1 inch, right?

2 A. Yes.

3 Q. All right. And now these are hail estimations,
4 right? So, probability -- probability of hail of a
5 certain size?

6 A. Yes. In this case a hundred percent.

7 Q. All right. How much was the probability on the
8 northern balloon of hail and what size?

9 A. 40 percent.

10 Q. 40 percent probability of hail?

11 A. Oh, a hundred per- -- I'm sorry. A hundred
12 percent probability that there was .75-inch hail. The
13 severity of that was 20 percent. Meaning it was on the
14 smaller size.

15 Q. All right. So, the hundred percent prob- -- on
16 the north, hundred percent probability of hail larger than
17 3 quarters of an inch? Is that what -- is that what it
18 said?

19 A. It says a hundred percent probability for storm
20 ID cell number F3. And the severe probability is
21 20 percent, meaning it would be -- and they pegged it at
22 .75.

23 Q. All right. And again, it's not hail on the
24 ground but it's -- it's based on the radar pane. And the
25 weather service is estimating a hail with a max size of 3

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1 quarters of an inch that was a hundred percent probability
2 north of the property; is that right?

3 A. Yes, that's what it says.

4 Q. Okay. And which of the panes or balloons do you
5 think is closer to the property? The one up the north or
6 the three in the south?

7 A. The one up the north.

8 Q. All right. And, again, why didn't you focus on
9 that one when you were trying to show us the weather that
10 day?

11 A. Because we did not see 4-inch hail on this site,
12 and we did not see .75-inch hail. We saw hail at 1.25 to
13 2 inches is what we circled and looked at. That would be
14 right in between these, indicating to me that it's likely
15 that the hail as it moved north, as it moved from the
16 bottom part of the property to the upper part of the
17 property, or in -- or from the north down to the south,
18 changed in size which would typical of a storm like this.

19 Q. All right. Have you looked at the radar images
20 for this storm?

21 A. We published a radar image, I believe, a couple
22 of pages down. Yes.

23 Q. Have you actually watched the radar in motion
24 that day, from that day, the recorded radar?

25 A. I'm not a meteorologist. So, no, I have not.

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1 Q. All right. And were you aware that there were
2 actually the two -- I don't know if you'd call them cells
3 or storms, but if you look at the time stamps, you can
4 actually see that there is a difference in time between
5 the three balloons at the bottom and the one balloon at
6 the top, somewhere in the neighbor of almost -- well,
7 probably over 20 minutes from when the first one started
8 to when the second one started. Are you aware of that?

9 A. Yes.

10 Q. All right. So, you believe that the storm moved
11 from either north -- same storm moved from north to south
12 or south to north?

13 A. You know, I'm going to tell you right now that I
14 am not a meteorologist. I can't answer that question.
15 What I can tell you is that I have training to harvest
16 this data and look at it in relationship to what I have
17 seen on the site. There is clearly damage to this
18 property that was caused by hail at -- between 1.25 and 2
19 inches.

20 I researched other storms including one in
21 2016 that had hail on top of the property that was much
22 larger than the stuff that I saw on the ground. So, I
23 eliminated that storm. So, in my opinion the storm that
24 occurred on this date more than likely caused the damage
25 that we saw.

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1 Q. How far back did you go -- you said you went back
2 ten years for your hail?

3 A. Yes.

4 Q. All right. But the -- the building at Auburn, I
5 believe, was built in 1999?

6 A. Yes.

7 Q. Okay.

8 MR. LUNDQUIST: Objection. That
9 mischaracterizes the evidence.

10 Q. (By Mr. Andis) All right. All right. I mean,
11 it's a matter of record, right, WebCAD or whoever built
12 the building or the one that built it, right?

13 A. I'm sorry. Is that a question?

14 Q. Yes, sir.

15 A. Absolutely, matter of record.

16 Q. Yeah. So, if WebCAD has the building being built
17 around 1999, that's probably -- and if they started taxing
18 it a full price in '99, I think that may be some
19 indication that that's when the building was built. You
20 got 2001. Do you know why y'all have 2001?

21 A. I would say that's when the building was
22 purchased.

23 Q. Well, the company that owns the building
24 purchased -- well, the company that owns the building
25 today had it built.

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1 A. Well, we just did a search on the -- on the
2 county Web site. And so maybe the company that developed
3 it, then put it into a different name in 2001. That's
4 just what we found, so.

5 Q. Okay. So, the building probably been around
6 since '99. So, my -- whether it was '99 or 2001, not
7 point -- point is why did you not go back and look at the
8 hail history or the area from when the building was
9 constructed?

10 A. There were no -- on any of the buildings that we
11 looked at, there is no evidence that -- that these
12 buildings were damaged even five or six years ago. I
13 mean, there is no -- I've been on enough buildings when
14 these -- when this Galvalume gets damaged by hail and --
15 and as a -- it's a -- it's a -- it's a hostage material.
16 I mean, it's a material that is there to help protect the
17 metal underneath. When it gets damaged by hail, within an
18 eight- to ten-year period you're going to see lots of
19 rusting occurring. There was none of that on this
20 building.

21 There was pollutants inside of the
22 indentations we cleaned out and took photographs of. We
23 couldn't on this particular building because it was
24 raining. But on the other buildings on the dry days --
25 and Johnson when he went down, did document those

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1 pollutants last week back in those -- those -- those
2 indentations. It's there. That -- if that had happened
3 back in '99 or 2000, those would be rusted out, which
4 doesn't make sense. That's why we didn't go back any
5 further.

6 Q. So, you went back far enough where -- well, you
7 didn't see any rust on the roof, right, when you looked at
8 it?

9 A. Right. So -- and we didn't see hail in the
10 signature size of the size that fell in 2016. So, we
11 eliminated everything prior to 2016 because there was
12 nothing big enough, and the size fit what we were looking
13 at for -- for this storm day. So, I think we did the
14 research to eliminate that.

15 Q. And the size hail you were looking for when you
16 went back historically was how big?

17 A. Well, based on my -- when I was there initially,
18 I was seeing indentations between 1.25 and 2 inch. So,
19 that's what I was focusing on, when did that occur. And I
20 believe that occurred on May 21st, 2016.

21 Q. So, the -- when you go back into that hail
22 history and, for example, you see a hailstorm of
23 March 18th, 2016, at -- estimated hail of 1.75, you would
24 discarded that -- you discarded that?

25 A. The -- when I looked at that -- and I -- I don't

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1 know where you're getting that information from. When I
2 looked at the severe weather data inventory and the hail
3 signatures that were on top of the property, they were
4 pulling at 2.5 the length on top of the property. Not --
5 you know, in Mexico like you're saying on the one that
6 I've -- I've -- I've pinpointed here. I didn't see that
7 size hail on this property.

8 Q. Did you -- do you have anything that shows hail
9 of two point whatever on top of this property in the last
10 ten years?

11 A. No, I don't; but I have it on the site.

12 Q. All right. So, you're saying your -- your ground
13 observations are what you're relying on as opposed to the
14 actual radar images that are predictive or estimated
15 radar, right?

16 A. Absolutely. I -- you know --

17 MR. LUNDQUIST: Objection.

18 A. -- I learned this back in 2010 when we were doing
19 the McAllen storm. I mean, we'd -- we'd see -- we'd see
20 reports from all kinds of Internet database hail reporting
21 areas. We'd even see it from NOAA, and we'd see 3-inch
22 hail in parts of McAllen or the surrounding areas. We'd
23 get to the site and these were with the address and there
24 is no damage at all. And then we go to another part of
25 town where it would say, geez, this -- there are

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1 signatures here of only 1 inch and we'd see holes through
2 the roof. There is no substitute for visiting the site
3 and doing a ground-truth investigation.

4 And what's interesting is that the engineer
5 for the insurance company said he didn't see any hail at
6 all. He said he saw no hail damage at all; and, yet, he
7 harvested samples to have them tested for hail. To me it
8 doesn't make any sense. What did he harvest, then, if he
9 didn't see any hail?

10 Q. (By Mr. Andis) I'm going to show you a document
11 -- can you see that, storm events database document there?

12 A. Just a second. Yes?

13 MR. ANDIS: All right. Why don't we go
14 ahead and mark this as Exhibit 4.

15 (Exhibit 4 marked)

16 Q. (By Mr. Andis) This is hail from 1999. And let
17 me just make a note here. And it has the various dates.
18 Do you see that?

19 A. Yeah.

20 Q. And it goes all the way up to just before the May
21 storm. And we got some, what, estimated hail sizes here
22 on -- in this magnitude column?

23 A. Yes.

24 Q. All right. So, what I'm wondering is you -- so,
25 we know you discounted everything before, I guess 2007?

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1 A. Yes.

2 Q. All right. And then -- so, you got some hail
3 sizes here, 3.5, 1.75, 1.75, 2.25. And I guess I'm
4 wondering did you exclude those as being possible sources
5 of the indentations that you believe were hail en route?

6 A. By linking -- by looking at the address. By --
7 so -- so, clicking on the one on the left. So -- so, if
8 you're -- right now where you are at the -- where you have
9 your cursor on the 2.5, on the 3/20/2012, you'd have to
10 then go to the Laredo link airport. You'd have to pull
11 that up on the site, and it would give you a map. And
12 then on that map you can draw a distance marker from where
13 that is being reported to where the property is.

14 Q. Okay. So, you did that for, what, everything
15 over a certain size here?

16 A. Yes.

17 Q. Okay.

18 A. And eliminated -- I just -- I just eliminated all
19 of those. The one at -- the one at 4.25 that you were
20 just on, I mean, that's -- that's not close to the
21 property.

22 Q. All right.

23 A. Callahan.

24 Q. All right. Where is Callahan?

25 A. You have to click on the map.

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1 Q. Okay. I just thought maybe you knew where it
2 was. So, then you got a -- I think you were talking about
3 a -- is it a -- since 2016 storms. So, you had this one
4 here, 2.5, 3.25 -- Pescadito -- 1.25, 1 and a quarter.

5 A. I didn't use this database for that storm. I
6 knew there was a storm in 2016. I used the SWDI for 2016.

7 Q. Okay. So, this is the NOAA or the NCEI,
8 National Centers for --

9 A. Right.

10 Q. Okay. All right. You did not use this to go
11 back and do your research?

12 A. Correct.

13 Q. The --

14 MR. ANDIS: You guys want to take a break?
15 It's -- we've been going about an hour and a half.

16 MR. LUNDQUIST: That's a good call.

17 THE WITNESS: All right. Good call. About
18 five minutes?

19 MR. LUNDQUIST: I show 11:30, but 11:40?

20 MR. ANDIS: That's fine.

21 MR. LUNDQUIST: Okay. Great.

22 THE REPORTER: Off the record.

23 (Recess taken)

24 THE REPORTER: We are back on the record at
25 11:43 a.m.

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1 Q. (By Mr. Andis) All right. Mr. Irmiter, I'm going
2 to follow up on something you mentioned a moment ago. I
3 believe you said something along the lines of -- or in
4 your opinion, hail density Galvalume will exhibit rust
5 within eight to ten years. Is that what you said?

6 A. I've seen that.

7 Q. Okay.

8 A. That will really be depending on the -- the metal
9 underneath. We've had some experience with metal roofing
10 products out of China that have been actually pretty poor
11 in terms of their performance. So, it would really depend
12 on the type of metal and potentially where it's
13 manufactured. We ran no tests on this particular site to
14 confirm any of that.

15 Q. Is that --

16 A. It was just what I've seen -- seen along the way.

17 Q. Well, I mean, you used the ten years as a cutoff
18 where you're going back in weather because -- I'm guessing
19 because you believe that in this case if hail had fallen
20 before ten years before your visit, it would have
21 exhibited rust in the dents?

22 A. Potentially, sure, depending on the -- the amount
23 of pollutants.

24 Q. Okay. What research or -- or basis do you have,
25 other than your observations and your experience, what

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1 literature is out there that supports that hail dents in
2 Galvalume will result in rust in eight to ten years?

3 A. Just a second here. We reference in the MCA
4 report. Going back to that report.

5 Q. That's the insulation manual?

6 A. No. So, just a minute. In section 8.1 on page
7 31 of 35, we -- we ref- -- we reference the MCA roofing
8 insulation manual circa 2014. And in particular a quote.
9 And according to MCA, oxidation can occur very rapidly
10 when excess water remains on a metal surface. So --

11 Q. Okay.

12 A. And that's what I'm referencing.

13 Q. Anything else?

14 A. No.

15 Q. All right. So, and then does that section on --
16 in the MCA manual, section 8 or actually anywhere in the
17 MCA manual, does it mention hail? Does it actually use
18 the word hail?

19 A. No.

20 Q. Okay. And then with respect to that particular
21 issue -- concern there in section 8.1, that really is
22 talking about trapped water, right?

23 A. Well, yes. And that's what is occurring on this
24 roof. When -- because of the slope of this roof, the
25 water is -- is being trapped in those indentations as

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1 evidenced by the -- as evidenced by the pollutants that
2 then show up in those indentions. Once the water
3 evaporates, you don't have those pollutants on either side
4 of the indentation where indentations have not occurred.

5 Q. Okay. Let's break this down. First of all,
6 the -- the MCA does not give you any kind of time frame,
7 eight to ten years, one year, five years? Doesn't say
8 anything on time, right?

9 A. That's correct, yes.

10 Q. All right. And in trapped water, aren't they
11 really referring to like sealant that lapsed, that trapped
12 water and it's not being able to be exposed to the
13 elements so that it can evaporate?

14 A. I think they're talking about trapped water
15 wherever it occurs. That's how I interpret it.

16 Q. So, hail -- a hail dent or any dent for that
17 matter that holds -- water's allowed to pond in for
18 whatever period of time, you would consider that trapped
19 water?

20 A. Yes.

21 Q. Okay.

22 A. In fact, the definition put forth by Haag for
23 functional damage on a low slope metal roof is very
24 consistent with that same theory and that is if the water
25 is slowed down and allows to accumulate, that is

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1 functional damage to the roof.

2 Q. All right. And what Haag --

3 A. I'm not the only one that has said that.

4 Q. Yeah, I understand. What Haag manual is that?

5 A. In the commercial manual. You can ask
6 Mr. Johnson about that.

7 Q. All right. So, there's not -- that's outside of
8 your -- outside of your scope on this one?

9 A. No, it's not outside of my scope. I'm very
10 familiar with it. I've quoted it many times in other
11 reports. I've --

12 Q. Okay.

13 A. -- testified about it. I've utilized it in my
14 arguments. Haag, you know -- that's their opinion.

15 Q. So, going back to the MCA, the -- aren't -- and
16 so, your position, even though they don't mention the word
17 hail, water that accumulates in a -- in an indentation is
18 trapped water on a roof?

19 A. According to Haag, yes. And there's what I --
20 that's what we -- we've seen.

21 Q. All right. What size hail would it take to leave
22 an indentation that would then result in trapped water?

23 A. Well, conflict's not just about the size. It's
24 about the hardness. So, you could have .75 inch hail that
25 is as hard as a marble or as soft as a malted malt ball.

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1 Both of those will react differently when they hit the
2 surface. The stuff that is very dense and very hard,
3 which is typical of hail at smaller sizes will -- will
4 create an indentation based on the study done by Koontz
5 which we referenced. There is a formula that you would
6 utilize to determine the size of the hail based on the
7 impact mark that is left.

8 Q. I'm just talking about metal roof panels. I'm
9 not concerned about any other material. So, you're saying
10 there is a Koontz study that gives you a formula for
11 density to -- to diameter and when it will leave an
12 indentation on a roof?

13 A. It's certainly a reference that we can use, yes.

14 Q. All right. Have you ever done eyeshots to -- to
15 metal panels to test any of these theories out?

16 A. No, because ice -- spherical ice that's grown in
17 the lab which is nice and round is not a true
18 representatives of the hail that falls from the sky. Many
19 people think it's circular like a golf ball, and that is
20 not the case.

21 Q. Well -- but, I mean, you -- you rely on Haag for
22 trapped water and Haag's done studies that -- where
23 they've shot ice shots at -- at metal panels. Are you
24 saying you can relay on them for their trapped water
25 theory but not for their eyeshot results?

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1 A. People do that the time, sir.

2 Q. Are you doing it?

3 A. Am I doing what, sir?

4 Q. Are you relying on Haag for one thing but
5 disclaiming Haag for another?

6 A. No, all I'm saying is that utilizing iceball or
7 steel-ball projectiles to duplicate what actually happens
8 in the field is problematic. That has nothing to do with
9 an indentation that traps water.

10 Q. I'm just asking if you know what size hail it
11 takes to leave even an indentation on a metal roof panel?

12 A. I've seen it happen at half-inch hail and I've
13 seen it happen at 4-inch hail and everything in between.
14 Have -- it depends on the velocity and it depends on the
15 hardness of the hail.

16 Q. And is there any kind of formula other than what
17 Mr. Koontz' study is that gives some -- some backup to
18 what you're saying as far as half-inch hail could leave an
19 indentation and a --

20 A. Well, the Koontz study also -- yeah, in the
21 Koontz study he references the Haag study. I think
22 there's one from Patrosky back in 1984 or Green. There is
23 a number of people who've -- who've indented metal of all
24 types over the years and they will continue to do it.

25 Q. Okay. How about mechanical or installation

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1 related indentations in these metal roof panels? Do those
2 also -- can those also hold water, trapped water?

3 A. Yes, absolutely they can. Typically the
4 mechanical indentations, though, are much for pronounced.
5 They're -- they have a much harder edge to them. We did
6 see some nicks up there that would be related to possible
7 mechanical damage. The problem with the finding it as
8 mechanical damage is then you have to take a -- a very
9 closeup photo of it to try and determine if, in fact, it
10 looks mechanical as opposed to damage caused by hail.

11 Q. And did you do that?

12 A. That was not -- what's that? Yes, we did; and
13 that was not done by Mr. Spiekerman.

14 Q. Okay. Because I'm looking at your photos and we
15 can go through in here in a little bit. But I didn't see
16 too many upclose, cleaned out indentations. Is there
17 another --

18 A. Yeah.

19 Q. -- set of photos somewhere?

20 A. Yeah, no, we couldn't do that on this project
21 because of the rain. The rain actually helped us -- hurt
22 us in one sense that we couldn't do that. And -- but in
23 the second sense, gave us some very, very nice overviews
24 of all of the indentations that had occurred as a result
25 of the hail. There were just way too many indentations.

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1 I think I had one photo where I'm showing 15 in a 4 foot
2 by 2-foot area. Way too many indentations in the way that
3 they were patterned to be mechanical damage.

4 Q. And what to you is a -- is a hail indentation
5 versus a non-hail indentation? What does it look like?

6 A. How it's -- how it's defined. How it defines
7 itself. I have never been on a roof where I have seen 15
8 circular indentations in a 4 foot by 2 foot area that we
9 related to mechanical. How -- how could that conceivably
10 happen? Somebody would have to sit there with a
11 screwdriver and a -- and a hammer and pound all of those
12 in that -- in that location.

13 Q. Okay.

14 A. To me that just doesn't make sense.

15 Q. All right. So, any other way that you can
16 tell -- so, it's the -- it's the congregation of the
17 indentations in an area. Anything else that distinguishes
18 between a hail caused indentation and something caused by
19 something else?

20 A. Yeah, the more circular nature that you would see
21 with the hail indentation as opposed to a mechanical
22 strike.

23 Q. And then you see any type of scratching or lack
24 of scratching inside that circular indentation that helps
25 you say that it's hail or not hail?

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1 A. Yes. Sometimes you will see scratching inside.
2 But sometimes you won't. Depends on what it was struck
3 with.

4 Q. Okay. So, you're saying hail can scratch a metal
5 roof panel?

6 A. No, hail can't scratch a metal roof panel, but
7 hail when it -- when it hits the metal, the reaction that
8 it creates, something has to give. For every action there
9 is an opposite reaction, basic, you know, sixth grade
10 science. So, something has to give when that occurs. So,
11 striations will occur in that metal when it is stretched
12 by the impact of the hail. Those striations are
13 oftentimes misidentified as scratches that are mechanical
14 in nature. And yet they follow the circular nature of the
15 indentation. We saw this at other properties where we
16 took closeups.

17 Q. Do you have any photos of striations and hail
18 indent at either auburn or JEF?

19 A. As we indicated because of the rain, we could not
20 get those. I believe Johnson may have captured that
21 because I know he cleaned out some when he did his
22 inspection last week.

23 Q. All right. So, you might see some -- now, if you
24 see some linear features, is that -- does that eliminate
25 hail or does that not eliminate hail in your mind?

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1 A. Well, certainly it would be one that I would -- I
2 would be less inclined to include that if I had a linear
3 feature. So, if I look at -- if I'm able to pinpoint 15
4 indentations and I examine each one of those closely and
5 blew those photographs up and 13 of them had no linear
6 scratching and two of them did, I would eliminate those
7 two. That doesn't still mean I didn't have a lot of hail
8 damage.

9 Q. Okay. I'm just asking if -- how we can identify
10 objectively a hail dent from something else as opposed to
11 well, you have to be there and I have to be there to tell
12 you. I would think there are some objective features to
13 it, and I'm just looking for what you consider.

14 A. Well, yeah, there are. And I think objective
15 features are that linear scratch. And the problem that I
16 have in this matter is that Stephen -- I'm sorry if I'm
17 pronouncing this wrong -- name incorrectly -- did not take
18 any closeups, at least they're not represented in his
19 report I've not seen his JPEGs prior to sitting for this
20 testimony today.

21 So, without having any closeup photos of
22 what he is calling mechanical damage, I can't eliminate
23 that as hail damage. And I can't also put it in the
24 mechanical damage category because there is nothing to
25 support that it's mechanical damage other than a picture

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1 that's taken, you know, chest high aiming down, which
2 doesn't give us enough information.

3 Q. All right. And then other than perhaps photo
4 that Mr. Johnson may have taken on the 15th of September
5 when you visited the property, you don't have any photos
6 that show that either, though, right, the closeups?

7 A. No, other than what we have from -- from Stolk
8 Labs from the stuff that was harvested by the public
9 adjuster, I believe it was.

10 Q. Do you know anything about the requirements for
11 the -- the -- the plates that were cut and what they
12 identified and what they took to Stolk?

13 A. No, I don't know that on either side. I don't
14 know that with regard to how things were harvested for the
15 insurance company either, so.

16 Q. All right. So, I mean, it's possible that Stolk
17 might have ended up with some mechanical damage that they
18 considered hail that somebody may have represented to them
19 was hail?

20 A. Well, they -- I -- I -- again, I don't know
21 Stolk. But other labs that we utilized and when we
22 analyze with all the microscopes, we can see those
23 linear --

24 Q. Sure.

25 A. -- scratches. And he didn't identify linear

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1 scratches.

2 Q. What other labs do you use for metallurgy?

3 A. Oh, we do our own now as you know. I mentioned
4 that to you. We've used a company called Exponent up here
5 in Minneapolis. There is another company in Dallas that
6 we've used before. I just can't recall the name. And
7 then there is one -- we use a company out of Michigan that
8 does a lot of our mold and our center-form fire
9 particulate on our fire losses. But they also do metal
10 with EDS, TEM and PLM microscopy.

11 Q. Do you have metallurgists on staff at your
12 company?

13 A. No.

14 Q. But you have all the metallurgical equipment?

15 A. Yes. So what?

16 Q. I'm -- I'm just trying to give you an opportunity
17 to market yourself here.

18 A. Yeah. Well...

19 Q. All right. All right. On the mesocyclone -- oh,
20 by the way, you were talking about the trapped water and
21 the MCA. And they don't give a time. You give an eight
22 to ten years before rust forms. But how -- what is the
23 code requirement for these low sloped roofs in terms of
24 water drainage? Do you know?

25 A. Well, what it is now and what it was at the time

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1 are two different things.

2 Q. Okay. When these buildings were built, what was
3 it?

4 A. 1999, undefined.

5 Q. So, the -- the -- the -- draining the water off
6 the roof, for how long the water could stand on the roof,
7 there was no code requirement in '99 when Auburn was
8 formed?

9 A. Not that I recall. We know that the -- we did --
10 I will answer the question by also telling you we did not
11 seeing any ponding effects on these roofs.

12 Q. Okay. No indentations of any kind regardless of
13 what caused them, hail or otherwise, no ponding when
14 you're -- in your visit?

15 A. Well, you're -- you're mischaracterizing what I'm
16 saying.

17 Q. Okay.

18 A. There -- there -- there is indentations that is
19 trapping water. But we're not seeing the affects of
20 ponding which would cause overloading and weight issues on
21 the roof.

22 Q. All right. I'm talking about ponding and a hail
23 indentation. What are you talking about?

24 A. I'm talking about ponding. Ponding would be on a
25 low sloped roof. When it rains, water will pool up to a

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1 certain depth and stay there for a certain amount of time.
2 The textbook code definition is 48 hours.

3 Q. Okay.

4 A. Where the water has 48 hours to dissipate. So,
5 if I get on a roof that had a rainstorm. Four days after
6 the rainstorm and there are sections of that roof where
7 there is standing water, that would be a ponding issue. I
8 would need to investigate why is that ponding is
9 occurring.

10 Q. All right.

11 A. That would not occur on -- anywhere in this -- in
12 this roof in terms of textbook ponding. I've never heard
13 ponding used in referencing water that sits in a hail
14 indentation.

15 Q. What do you call that, water that sits in a hail
16 indentation.

17 A. Water that sits in a hail indentation.

18 Q. And how long -- how long does water sit in a hail
19 indentation in Laredo?

20 A. Until it dissipates.

21 Q. And how long does that take?

22 A. I -- we've never measured that. I don't think
23 anybody has.

24 Q. Does it take longer to dissipate in the hail
25 indentation than it does the rest of the roof?

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1 A. Yes, typically, yes. In fact, you see that
2 phenomenon. I've been on roofs before where we have done
3 water tests where we will take water, we will add food
4 coloring to it and we will run it along the roof from a
5 water bottle on a hot day and let it run into the
6 indentation and around the indentation and we'll
7 photograph and document that. And the water around -- the
8 water that is not in the indentation will dry very, very
9 quickly. And the water in the indentation will stay there
10 longer.

11 Q. How much longer?

12 A. Sometimes three to five minutes longer depending
13 on how hot it is. But yes.

14 Q. And is this the Laredo environment, three to five
15 minutes?

16 A. Probably.

17 Q. Okay. But you've not done --

18 A. The issue is not -- the issue is the water, but
19 the issue is also the pollutants that it's collecting.
20 That's -- that's really the issue.

21 Q. Okay. We'll get to that.

22 A. Yeah.

23 Q. So, three to five minutes longer. But you've not
24 done any of this testing in Laredo?

25 A. No.

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1 Q. Okay. On the mesocyclone you told me that you
2 were estimating the speeds at the property being 90 miles
3 per hour and that was based on your visual observations
4 or -- or the pictures that were brought back to you of the
5 roof?

6 A. Yeah. I think that that was also verified by --
7 by the expert for the insurance company I thought who
8 pegged it at 90 as well.

9 Q. You think --

10 A. I may be wrong.

11 Q. You think that's what he estimated?

12 A. I think so. Might have been 93. I can't
13 remember.

14 Q. Okay. All right. Any other basis for your
15 opinion that 90-mile-an-hour wind gu- -- I guess these
16 were gusts -- struck the properties?

17 A. No.

18 Q. And with respect -- and I'm just generally gonna
19 ask you and if we need to be specific as we go, that's
20 fine, but with respect to the wind gust, how did you
21 determine that wind from May 21st, 2017, caused what you
22 believe to be wind damage versus other possible wind
23 events from the --

24 A. Follow the leak history. The leak history
25 report. So -- and -- and that leak history report was

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1 very helpful for us because it -- it really -- it gave us
2 when our guys got down there and did the inspection and
3 they have that, they were able to really segment out old
4 versus new damage, preexisting stuff prior to the storm.
5 And what's interesting is when you look at that leak
6 history report -- and this is an area that does not get a
7 lot of rain -- most of the leaking, it -- it exponentially
8 goes up after the storm as opposed to prior to the storm.

9 I think one of these locations has spent
10 \$300 bucks prior to the storm and then, you know,
11 thousands after. Each one of these, you know, typically
12 occur over a one- or two-day period in terms of when
13 they're -- they're in there doing their work. So, I can
14 speculate; but those are probably after rainstorms, if
15 that makes sense.

16 So, the leak history was very, very
17 important to us. They were -- they were maintaining this
18 roof before. This roof was functioning before this wind
19 damage. And it's very, very clear now that that
20 reasonable facility' maintenance that they were doing no
21 longer was going to work.

22 Q. I'm going to show you what I believe you're
23 referring to as the leak report. This is the Underpaid
24 Claim Leak Report for Auburn. Is this the report you were
25 just referring to for the leak at Auburn property?

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1 A. I believe so, yes.

2 Q. Okay. And you have this, right? It's in your
3 list of items received.

4 A. Yes.

5 Q. All right. With respect to this report, what --
6 can tell me what you're relying on to distinguish between
7 old leaks and new leaks?

8 A. There is a -- I think it's in this report. It
9 might be in the other documents. But there is a
10 spreadsheet of cost that they paid. So, they have an
11 invoice number and a date that they did the work. And
12 when you take a look at prior to the storm the amount that
13 they were spending and then after the storm, it jumps
14 significantly. That is typical of a roof that has been
15 damaged by wind.

16 MR. ANDIS: All right. I'm gonna mark this
17 as Exhibit 5. It's the Underpaid Claim Leak Report for
18 Auburn.

19 (Exhibit 5 marked)

20 Q. (By Mr. Andis) I don't see in here any kind of
21 spreadsheet. It's just lot -- really a lot of pictures.
22 Do you see anything that just helps you distinguish
23 between old leaks and new leaks in this report?

24 A. In this particular -- in that document?

25 Q. Yes, sir.

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1 A. No, I was referring to the -- what I'm referring
2 to is not this report. I'm referring to the spreadsheet
3 that shows the money that they were paying prior and
4 after.

5 MR. LUNDQUIST: For the record, I'm going to
6 object that this is not the complete version, at least
7 what I saw, David, of the -- of the leak report. It's
8 missing the actual leak diagrams and the complete report
9 that we -- that was produced in litigation. So, I'll just
10 lodge my objection and be quiet.

11 MR. ANDIS: Thank you.

12 Q. (By Mr. Andis) All right. So, you're referring
13 to some kind of spreadsheet you think that actually show
14 you money spent on repairs?

15 A. Yes.

16 Q. Let's do this. I didn't pull this out for easy
17 access, but I think I can find it. Mr. Irmiter, this is a
18 document that you produced called Brabo repair receipts,
19 doc PDF.

20 A. Yes.

21 Q. Is this what you're referring to?

22 A. Yes.

23 Q. Okay. So, these are actually interrogatory
24 answers, plaintiff's interrogatory answers. And then
25 it's -- it's got a just an excerpt from, I guess,

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1 Interrogatory No. 6. And it shows the answer. And then
2 it has some invoices and some checks --

3 A. Yeah.

4 Q. -- after that. Okay. And you're saying based on
5 the fact that you've got, what, one, two, three, four,
6 five, I guess, repairs before the storm at JEF and then
7 five repairs starting in two thousand -- late 2018 at JEF,
8 that that indicates to you that it's also been damaged by
9 rain in May of '17?

10 A. Well, yes. And the invoices themselves, I
11 believe that the largest of the invoices the 2,086 was
12 related to an air conditioner on 1/29/15.

13 Q. Okay.

14 A. 2015. That's -- that I think is an anomaly from
15 that standpoint, if I remember looking at these things.

16 Q. Let me see if we've got that one here. No, I
17 don't see it. All right. So, you think that the Ojia
18 Construction from 1/29/15 is AC work?

19 A. Yes. So, the remaining stuff is very minimal.
20 That's going to be chasing an individual leak and patching
21 it.

22 Q. Okay. All right. Well, I may actually have
23 that. See if I can't pull that up quickly.

24 A. I don't read Spanish. So, that will be
25 problematic.

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1 Q. Yeah, yeah, yeah, that took a little effort. All
2 right. Let me show you -- all right. What I tried to do
3 here is take the documents and put them sort of in some
4 kind of order. So, I'll represent that the order that you
5 see is not the order they were produced; but they have the
6 Bates numbers. So, going back to the beginning, we have
7 an amount of -- looks like total material labor was 3210.
8 And I think that is paid with a couple of checks. This is
9 the first one. And I want to say that this was
10 probably -- if the -- if checks are right, probably about
11 January of 2015. And you don't know what -- what the work
12 is that they did?

13 A. Oh, on No. 3, I recognize the word "interior."
14 So, clearly they're doing some interior work and billing
15 for it. But I don't -- if my daughter was here, she could
16 interpret this for me. No, I don't know.

17 Q. Same. Same. All right. So -- well, we don't o
18 know. If it was related to -- to the roof work because I
19 want to say Ms. Moore testified that they have a different
20 company that does air conditioning work. You know, maybe
21 I misunderstood. I'm not trying to be misleading. But
22 before the storm, we've got -- let me stop sharing and dig
23 can out of this mess I made. We're going to go back to
24 the document that I showed you earlier with the
25 interrogatories. All right. So -- so, for -- for your

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1 purposes, when you were trying to determine if leaks were
2 old or new, you relied on this spreadsheet on the attached
3 invoice that were provided to you; is that right?

4 A. Well, yeah. And I think it's also important to
5 note that -- you can ask Mr. Johnson about this, but my
6 conversations with him last week, the building is still
7 leaking and they have stopped attempting to repair it
8 because of this litigation. So, while we are seeing stuff
9 in 2019, at some point they've just given up. And I'm no
10 longer attempting to stop the leaking because of the
11 amount of leaking that's occurring. That's what I
12 understand to be the case.

13 Q. (By Mr. Andis) Other than the --

14 MR. ANDIS: Go ahead and mark this is as
15 Exhibit 6. It's going to be the Brabo repair receipts
16 PDF.

17 (Exhibit 6 marked)

18 Q. (By Mr. Andis) And you didn't -- you didn't talk
19 to anybody in particular to distinguish between old leaks
20 and new leaks or none of your guys did, right?

21 A. When our guys were there, they wouldn't have done
22 that. They would have asked about -- and I know Johnson
23 did this last week on these properties as well -- they
24 would have asked tell me about this ceiling tile. Is this
25 an old leak or a new leak? And if they were told it's a

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1 new leak, they would have taken a photograph of it.

2 Q. All right. And, now, they were there in 2019.
3 The storm occurred in May of '17. Do you know how they
4 attempted to distinguish between leaks that occurred
5 before the storm versus leaks after the storm or even new
6 leaks that developed after that even?

7 A. Well, certainly the infrared that we took on the
8 day would show active water when it was raining coming
9 into the building as one indicator that the roof was
10 leaking. The -- we know the ceiling tiles as a routine
11 are being replaced. In fact, the -- the documents that
12 you were showing me before, I think that probably is the
13 interior references potentially. I don't know. But we
14 know ceiling tiles as a matter of practice were being
15 replaced. They stopped doing that according to
16 Mr. Johnson. They're not doing that any more. They're
17 just letting it -- and they're trying to manage their
18 tenants who are not happy about the process. So, that's
19 all I can tell you.

20 I'm not gonna -- counselor, I'm not going
21 to, you know, back away from the fact that this is an old
22 building and it probably had some leaks. You know, that's
23 fine. This is the client that clearly had a maintenance
24 process. They had a contractor involved. They were
25 inspecting this roof. They were maintaining it. They can

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1 no longer do that. And I don't think it's because of the
2 hail that they can no longer do that. I think it's
3 because of the wind damage.

4 Q. So, just to be clear, on both buildings you don't
5 think any hail penetrations or hail caused any
6 penetrations into the roofing system?

7 A. There are no storm-created openings from hail
8 that we saw. There are multiple storm-created openings
9 from wind.

10 Q. So, any -- any -- any opening that's storm
11 related on both properties in your opinion is wind?

12 A. Absolutely.

13 Q. Okay. All right. Did you go back and take a
14 look at any older aerial photographs to determine whether
15 they've been attempting to stop the leaks from prior to
16 the storm?

17 A. No, because they're not admissible in the courts,
18 it's not reliable and we do use those for -- for the
19 purposes of a condition assessment. We use those only for
20 the purposes of -- only for the purposes of acclimating
21 the building to the terrain.

22 Q. Okay. So, I mean, really the -- the real
23 question I have is did you go back and look aerial
24 photographs to determine where they were treating leak
25 areas before the storm, and you said no. And then you

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1 gave me a reason why. But you didn't -- you still didn't
2 do it, right?

3 A. That's right. It's not reliable. So, we don't
4 do that.

5 Q. Okay. All right. You say it's not reliable.
6 Why is it not reliable?

7 A. You can't -- you can't pinpoint who took the
8 photo. As I indicated before with Google Earth and with
9 pictometry, they use a variety of sources to gather that
10 information. And so, unless you could interview the
11 individual who took it, verify that the metadata hasn't
12 been corrupted, you have no idea the photo that you're
13 looking at when it was actually taken. They publish when
14 it was taken, but you can't rely on that.

15 Q. If you could go back and rely on it, would
16 that -- do you have any other issues with it? If you
17 could verify and authenticate it, would you have any
18 others issues with it?

19 A. Yeah. I think that using it as a condition
20 statement is a -- is a stretch. Looking at something from
21 2000 feet above and trying to say that this is an area
22 that didn't exist before and so this is an indication that
23 they had damage as opposed to indicating that, yeah, maybe
24 that white streak on there is a fly on the photography,
25 maybe in fact it represents that somebody went up on the

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1 roof with a some elastomer coating and locally repaired an
2 area doing reasonable facilities maintenance. What's
3 wrong with that? Why wouldn't you do that if, in fact,
4 that's what they did?

5 You know, from the insurance company's
6 standpoint, you're damned if you do and you're damned if
7 you don't. If you don't do you reasonable facilities
8 maintenance, they're going to say you didn't do that. And
9 so, we're not going to cover anything because of wear and
10 tear and lack of maintenance. But when you do maintain
11 it, that's an old roof and so all the damage is related to
12 that. I don't think that's the case here.

13 Q. Are you -- are you going to be giving any
14 opinions on the claims handling of adjustment in this
15 matter?

16 A. I have not been asked to do that in this matter.

17 Q. Okay. On page Brabo 2066 of your report, section
18 1.4, it's your interactive hail maps photograph?

19 A. What page, please, again?

20 Q. Brabo 2066, it's page 5 of 35.

21 A. All right. Thank you.

22 Q. Yeah.

23 A. Got it.

24 Q. All right. This -- is this something that you
25 pulled from the interactive cell map site?

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1 A. Yeah, my staff pulled that and put it in.

2 Q. Okay. Did you have a specific report for this
3 property or did you pull this from other reports that you
4 had already -- I mean just pull it over from another
5 report that you had already done?

6 A. I -- I can't answer that question. This would
7 have been inserted by staff and they would have put the
8 arrow -- the approximate location of the property on here.

9 Q. Okay. Because this is --

10 A. This is more just indicating -- this is just more
11 indicating that there was a -- there was a storm that day,
12 and this was the information that we obtained.

13 Q. Okay. My understanding was there was usually a
14 historical storm activity chart associated with the
15 interactive hail maps, a page when you go there. Is there
16 a reason why that was not included?

17 A. No, I don't know.

18 Q. Okay. And let me see. I think I have the
19 narrative here. All right. So, on the interactive hail
20 map site -- and I'm not sure how to show this without
21 showing all my other stuff. There's a lot of individual
22 entries. You know what I'm talking about on a timestamped
23 basis?

24 A. Yes.

25 Q. And each -- next to each one would be this --

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1 kind of this radar map that you pulled that it would be
2 reflective of a particular time that they're talking
3 about. I think this one that you pulled was from the 4/29
4 time frame on May 21st, 2017?

5 A. Okay.

6 Q. All right. And -- just trying to see here.
7 Yeah, 4/28 CDT, a severe thunderstorm. Did you summarize
8 the interactive hail maps narrative or did y'all try to
9 quote it verbatim?

10 A. We summarized it, I believe. Again, please
11 understand why this is in here. All right. I am not a
12 meteorologist. I am simply indicating that this is
13 another source that indicated that there was a large storm
14 event on May 21st. And it does mention the directionality
15 and it mentions some of the things that occurred. It's
16 background information.

17 Q. Okay. So, almost like a yes/no kind of thing,
18 here's evidence that something is going on in Laredo on
19 May 21st, '17?

20 A. Correct.

21 Q. And to be clear your opinion is that the damage
22 that's at issue in this lawsuit when it comes to both
23 buildings, JEF and Auburn, occurred on May 21st, 2017?

24 A. Yes. And particular, the wind damage.

25 Q. All right. All right. Then we have a hail point

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1 reference on page 7 of 35, Brabo 2067?

2 A. Yes.

3 Q. Did you actually pull the -- any documents from
4 hail point?

5 A. Only I think what's here.

6 Q. Okay.

7 A. This is --

8 Q. This is like a clip artist, yeah -- I mean, it
9 looks like a -- a cut and paste from the hail point page
10 without any of the underlying data.

11 A. We may have gotten this off the Internet.

12 Q. Okay. All right. And is there any relevance to
13 the particular graphic that we saw -- that we see on
14 page 7?

15 A. We didn't add any relevance to it. It's just
16 showing the -- that there's a fairly large storm occurring
17 right over Laredo.

18 Q. Down below the -- the photo on 1.6, you have a
19 reference to some -- I guess some online articles or
20 videos? Did you pull those together?

21 A. No, my staff would have done that. Again, as I
22 indicated, this is for background purposes, indicating
23 that there was an event that occurred on that day. These
24 are the various sources that indicate other than us that
25 something occurred that day because we were not there.

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1 Q. All right. So, you're not giving necessarily any
2 credibility to the content or the veracity of the content
3 on these links?

4 A. No, I'm not.

5 Q. Okay. Because like -- did y'all download these
6 because one of these -- the link is broken now or is not
7 working. That second one, Video of High Winds in Laredo,
8 Texas, May 21, '17, did you have a copy of that?

9 A. No, we didn't download these. These are ones
10 that we looked at and said here's one, here's one, here's
11 one.

12 Q. Did you look at any of these?

13 A. Yes, I did back putting this together.

14 Q. Okay. Do you remember -- did you look at
15 anything else from that storm event either online, YouTube
16 or the Laredo Morning Times, anything like that?

17 A. No.

18 Q. Okay. So, just the four that you've listed in
19 the -- in your report you reviewed?

20 A. Yes, for purposes of background information.

21 Q. All right. On page 11 of 35 of your report, it's
22 section 2.0, structured information. You -- you note the
23 building was manu- -- or constructed in 2001, WebCAD shows
24 two -- '99. No idea where the 2001 came from or why it
25 differs from what the appraisal district shows?

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1 A. No.

2 Q. Okay. But you do believe the metal roof that's
3 on the building at Auburn is original to construction?

4 A. Yes.

5 Q. You say the area's surrounded by large parking
6 lot. Okay. We talking about -- you say there is a large
7 open field. And maybe I ought to show you the report so
8 that we're on the same page.

9 A. I got the report open.

10 Q. Yes, sir. But sometimes I -- I need you to -- I
11 need to point to something and have you --

12 A. Yeah.

13 Q. -- tell me the -- yes or no is what you're
14 thinking. All right. Can you see the report?

15 A. I can.

16 Q. Okay. So, let me just make this one page. This
17 is the page -- section 2.0 photo and 2.1 narrative. See,
18 you mention a large open field to the immediate south.
19 And are you referring to this open field?

20 A. Yes.

21 Q. Okay. So, just for reference, this -- are you
22 familiar pretty much with Laredo?

23 A. No. I mean, I've been there, but I don't, you
24 know --

25 Q. Okay. This is the -- this is Interstate 35.

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1 That runs all the way up to Minnesota, doesn't it?

2 A. Does, yeah.

3 Q. Yeah. All right. This is the -- you can
4 actually see that when this picture was taken, it was
5 under construction. They've now finished this overpass.
6 This is Mines Road here to the west of 35. So, the field
7 that you're referring to is south of the loop and east --
8 assuming up is north, east of 35 has a big look like a
9 retention pond or lake there, right?

10 A. Correct.

11 Q. Okay. What is the significance of the presence
12 of this large field at Mines Road and south of Loop 22
13 here?

14 A. The -- that and -- and the open area to the left
15 of the property, the green space.

16 Q. Talking about this strip?

17 A. Yeah.

18 Q. This -- to the west? Okay.

19 A. Yeah. And then that field -- right -- keep
20 going. That brown field right there. Yeah, that area.
21 Well, those -- those area -- those two areas in particular
22 less than the open field in our opinion would be subject
23 to a higher wind load because if you -- if you go -- if
24 you keep moving to the left where you have your cursor,
25 now you have another open field.

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1 Q. This --

2 A. So -- so, we're creating an alley, if you will,
3 or a wind tunnel that's gonna go right between those
4 buildings and put our building in a category C for wind
5 exposure.

6 Q. All right. Now, how does that affect -- that --
7 that wind starts, I guess, over here to the southwest.
8 How does it affect these other buildings that are between
9 the wind and the Auburn building?

10 A. You get some buffering from those. But I don't
11 believe it's enough to put it in a category B, based on
12 the terrain. This is all based on terrain.

13 Q. And then in terms of the accuracy of the picture
14 that we're looking at here, April 22nd, 2017, you're
15 relying on this being an accurate representation of what
16 these -- you know, the buildings or lack of buildings was
17 relative to Auburn, right?

18 A. Yes, we are relying on that. But I recall
19 driving by and seeing that on the right-hand side. It's
20 one of the things I look at when I go to these sites
21 personally is I look at terrain particularly if it's a
22 wind claim.

23 Q. Well -- so, does the large open field south of
24 the loop and east of Mines Road, does that not have that
25 much to do with your surface roughness, C designation?

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1 A. It would if the one, two, three, four, five white
2 buildings -- or six white buildings, yeah, right in there,
3 if those are lower in height, then our building in
4 question -- which I believe they are -- then that would
5 also have an affect.

6 Q. What about this building just to the north of
7 those six white buildings?

8 A. I believe that's lower -- I believe that's lower
9 as well.

10 Q. Did you get any measurements like to know for
11 sure whether it's lower and if so, how much?

12 A. No, just eyeballing them when I'm up on the roof.

13 Q. All right. Did you get a copy of the design
14 plans for either building in preparation of your report?

15 A. No, that would have been nice to see because,
16 then, the wind-load calculations typically would have been
17 on there and we would definitely be able to tell you if
18 they were rated for a 90-mile-an-hour wind or an
19 80-mile-an-hour wind.

20 Q. Okay. And we don't know that? We don't know
21 what the buildings are rated for?

22 A. No. We can -- just based on my education,
23 training and experience and having worked on buildings and
24 actually designed and built buildings like this back in
25 that time frame, I can only rely on what would have

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1 occurred -- what we would have built them at. And that
2 would have been most likely 90 miles an hour.

3 Q. Did you -- were you constructing buildings in
4 2000, these --

5 A. We were working on warehouse buildings in 1999,
6 1998, that frame. So, yes.

7 Q. And where at?

8 A. Under -- under those codes.

9 Q. Okay. Where at?

10 A. Minnesota.

11 MR. LUNDQUIST: Let them know not here.

12 Q. (By Mr. Andis) Up in Minnesota?

13 A. Yeah.

14 Q. Okay. all right. Let me get out of this.

15 On the -- page 12 of 35 of your report,
16 we're now under temporary repairs have been made after the
17 storm and prior to our assessment, other than that exhibit
18 we looked at earlier -- I believe it's Exhibit 6, those
19 repair estimates that you have provided -- do you have any
20 specific idea of where repairs were made and when they
21 were made to the property?

22 A. Well, no, other than the -- the harvesting of a
23 large section of panel that was done by Mr. Spiekerman and
24 his group and taking photographs of the improper
25 installation of that panel. There's actually an opening

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1 at the inner wrap of that panel and the other panel.
2 Which is problematic.

3 Q. Are you saying that it's leaking from the
4 replaced panel that Mr. Spiekerman's company that --
5 whoever the roofer was put on the property?

6 A. I don't know why it wouldn't be based on the
7 opening that's there --

8 Q. All right.

9 A. -- the seam.

10 Q. Did you inspect that?

11 A. Please understand that the -- the -- where the
12 water enters on the exterior on a roof like this is not
13 where it exits on the interior. They're -- they're never
14 co-located because of the slope and because the insulation
15 that's in there. So, you could have an opening 25 feet
16 up- -- upward of where the water actually exits to the
17 interior. And that also sometimes explains why roofing
18 contractors or maintenance people have to go back to the
19 same area repeatedly over a couple of days to do patching.
20 They're patching the same location. It looks like they're
21 patching multiple roof leaks but it's the same one and
22 they're trying to chase that leak.

23 Q. I asked you if you thought that it was leaking
24 from the -- where the panel on Auburn had removed and
25 replaced. And you said --

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1 A. I said it could be.

2 Q. Well, but do you know if it is or is not?

3 A. It certainly could be.

4 Q. All right. So, you don't know for sure?

5 A. I do not. Did not water test it.

6 Q. All right. And you -- when you were actually
7 inspecting the roof, had it already been done, that panel
8 replacement?

9 A. That panel replacement, yes, that had been done.

10 Q. Okay. And did you -- because you didn't take any
11 photos, but when did you find the -- the seaming issue, on
12 your inspection or when you got some photographs back from
13 your team?

14 A. No, I saw it on my inspection and I asked our
15 people to specifically focus on -- on the installation of
16 that seam because it looked like it -- few things had
17 occurred by when I saw it and when I walked on it. It
18 looked like it had -- an attempt to retrofit that panel
19 had been done by crimping it into the existing panel that
20 was not done properly. And in that type of a system, you
21 can't then anchor that panel to the framing underneath.
22 That's not how these roofs are installed. So, that would
23 not meet current code requirements for wind-luff --
24 wind-lift applications. So, that repair was deficient.

25 Q. All right. Have you taken any efforts to

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1 deconstruct that and see if it -- if it's attached to the
2 clip and it's just an issue with maybe the second or third
3 overlap on the seam?

4 A. No, but walking on it, you can tell it's not
5 attached to the clip.

6 Q. Prior to the property -- the storm, do you have
7 any idea as to what caused the need for the repairs that
8 they were making and where those repairs were taking
9 place?

10 A. They looked to be -- to be reasonable facilities
11 maintenance. And they looked to be in an effort to deal
12 with localized leaking. This was not a roof that
13 presented itself as having widespread problems which I've
14 seen plenty of.

15 Q. All right. Let me show you this. And I will
16 state for the record that you believe that photos like
17 this are unreliable. This photo that I'm showing you now,
18 which I'll mark as Exhibit 7, is a photo from pictometry
19 that was purportedly taken of the Auburn building, 1/13 of
20 2013.

21 (Exhibit 7 marked)

22 Q. (By Mr. Andis) Putting aside your issues with
23 reliability, Mr. Irmiter, do you see whether there have
24 been attempts to report -- repair leaks prior to the storm
25 of May of '17?

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1 A. No, I don't.

2 Q. Okay. So, do you see the black, what appears to
3 be sealant at the front -- which would be over the office,
4 right?

5 A. Can't tell what that is.

6 Q. Okay. All right. So, then, the black here --
7 this a skylight, right? You have row -- two rows
8 skylights? Do you agree these are skylights?

9 A. Those are -- those are light panels, yes.

10 Q. Okay. Translucent panels?

11 A. Yes.

12 Q. All right. And then this black in -- going
13 toward the back of the building from that skylight,
14 that -- you don't know what that is?

15 A. I can't tell what that is, no.

16 Q. Okay. And -- and then this black stripe over
17 here by looks like some striping there. It end-laps.
18 Even maybe that's dirt accumulating. You don't know what
19 any of that is?

20 A. I -- again, I've answered that question. I can't
21 tell what that is.

22 Q. Okay. Go to -- try to go to it. This is a
23 February, 2015, photo -- or at least it claims to be -- of
24 the Auburn building. You see how this area up in the
25 front of the office is now white?

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1 A. I do see a difference in color there, yes.

2 Q. Okay. Does that look to you like someone may
3 have been trying to put some sealant there to stop some
4 leaks at the front of the building?

5 A. Well, if in fact that were the case, why would
6 that be a problem?

7 Q. I'm just asking you, sir, if you see that maybe
8 they're trying to stop some leaks at the front of the
9 building as early as either '13 or '15?

10 A. I cannot speculate as to why the color is
11 different and why that's there. But if, in fact, it is
12 what you're alluding it to be, why would that be a
13 problem -- wouldn't that be reasonable for (inaudible)
14 maintenance?

15 Q. I lost your answer. I don't know if I'm having a
16 technical problem or it happened somewhere else.

17 MR. ANDIS: Rick?

18 THE VIDEOGRAPHER: No. It did freeze for a
19 second. It should be good now.

20 Q. (By Mr. Andis) All right. I'm just asking you,
21 sir, if that appears to be sealant or not? That's all.
22 Only question.

23 A. I can't tell. I can't tell what it is.

24 Q. All right. And then -- okay. We'll come back to
25 those. Those will -- we'll look at that later. And

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1 then -- we'll do the JEF when we get to the JEF building.
2 So, all right. You don't know if they made repairs or
3 not; and if they did, you don't have a problem with that,
4 right, at Auburn?

5 A. Well, I know that they -- I do -- I do know they
6 made repairs. There's evidence of repairs on the roof.
7 So, that would be a misstatement. It's clear to me that,
8 yes, this -- there is repairs that have been done of this
9 roof.

10 Q. Prior to the May --

11 A. There was a section of panel that was removed.
12 I'm not sure who removed that but I recall it's in
13 Mr. Spiekerman's report and it appears that he is on the
14 roof overseeing that removal and replacement.

15 Q. Okay. And then I'm just talking about repairs
16 prior to the storm, not stuff after the storm. So, would
17 you agree that there is some -- there are some repairs
18 being made to the Auburn property, the roof of the Auburn
19 property, prior to the May of 2017 storm?

20 A. Yes, there's evidence of historical repair
21 materials on that roof when I visited the leak of
22 July 22nd, 2019.

23 Q. Okay. And those repairs were efforts to -- what
24 appears to be efforts to stop water penetrating into the
25 interior of the property, right?

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1 A. That would typically be the only reason somebody
2 puts what we call pookie on the roof.

3 Q. I see they call it in Minnesota.

4 MR. ANDIS: Can we go off the record for a
5 little bit?

6 THE REPORTER: Off the record at 12:40 p.m.

7 (Recess taken)

8 THE REPORTER: On the record at 1:13 p.m.

9 Q. (By Mr. Andis) Mr. Irmiter, we just got back from
10 a lunch break. I want to focus now on your Auburn report,
11 section 3, which is, I guess, starting of the roof
12 observations. Do you have that report handy there?

13 A. I do.

14 Q. All right, sir. You state that the standing seam
15 metal roof showed impact damage throughout the roof. Are
16 you calling spatter damage?

17 A. No.

18 Q. Okay. So, these would be indentations?

19 A. Yes.

20 Q. And then with respect to the degree of
21 indentations, you're not commenting upon whether such
22 is -- this particular indentation is functional to the
23 panel versus this is just a nominal indentation? You're
24 not making a distinction, right?

25 A. I -- yes, I am.

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1 Q. Okay.

2 A. I mean based on -- based on the metallurgist
3 report and based on the fact that it's restricting water
4 flow, I believe it is functional damage.

5 Q. All right. So, your basis for functional damage,
6 then, is it based in the policy or is it based on your
7 definition of functional damage or somebody else's
8 definition?

9 A. I don't make policy decisions and I don't review
10 policies. I haven't reviewed the policy in this case.
11 So, I don't know what the language is.

12 Q. All right. So, if an indentation holds water,
13 even that extra three to five minutes, that would be
14 functional damage to you?

15 A. According to definitions prescribed by myself,
16 Mr. Johnson and other entities such as Haag.

17 Q. All right. Any studies out there that show how
18 long it takes sediment or what have you collecting in a
19 hail indentation to cause that indentation to rust through
20 and create a hole?

21 A. No.

22 Q. And then your other definition of -- of -- of a
23 hail -- hail dent is damage -- what was the other reason
24 why? You believe a hail dent is damage?

25 A. It restricts water flow.

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1 Q. Okay. So, how's that different than it -- than
2 retains water?

3 A. Oh. Oh, I'm sorry. The other would be based on
4 the report issued by Stolk Labs and their analysis of the
5 impact marcations that they looked at showing fractures
6 and striations in the metal.

7 Q. All right. And -- and you're -- already told
8 me -- I thought you said earlier you're not commenting
9 upon the merits or -- or veracity of the Stolk report.
10 You're not gonna give metallurgical -- well, you haven't
11 been asked to and you haven't written a report on the
12 metallurgical aspects of this to date, right?

13 A. No. All I will comment on, if asked, is have you
14 ever examined metal Galvalume under a microscope? Yes.

15 Q. But you haven't examined any of these roof panel
16 under the microscope, right?

17 A. No. But have you reviewed the photos and the
18 report by Stolk? Yes.

19 Q. All right.

20 A. Is that exemplar of what you would expect to see
21 when you've examined metal under a microscope with the
22 fractures? Yes.

23 Q. Okay.

24 A. That's all -- that's all I can say.

25 Q. Appreciate the -- the preview there. All right.

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1 So, between the Stolk report and your opinion that hail
2 independents retain water longer than the rest of the roof
3 and sediment collects in that -- and it -- and it could
4 cause damage in your opinion, no other definition of
5 damage from hail that you intend to apply in this case to
6 the roof, the metal roof panels?

7 A. The only other point that I would make -- and
8 again we have not answered -- asked to rebut in writing
9 the BCS report. But BCS -- I believe it's BCS. It may be
10 the other metallurgical report or a combination of both.
11 But they comment about the fact that the metal is -- is
12 bent in the manufacturing process to create the profiles.
13 And they indicate that sediment can sit in some of those
14 profiles and not cause damage. What they fail to mention
15 is -- and I've -- I've actually seen the manufacturing
16 process done to Galvalume. They failed to mention is that
17 the bending process that occurs is prior to the
18 installation of the Galvalume coating.

19 And so, I would expect that sediment sitting
20 in those areas that are bent in the manufacturing process
21 do not cause damage because the Galvalume coating is
22 protecting it. It's when the hail causes fractures to the
23 Galvalume that the damage occurs. So, again, the
24 comparison that is being made is incorrect.

25 Q. All right. Let me make sure I understand what

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1 you just said. It's your experience or opinion and -- and
2 you -- I think you said you've seen this actually that
3 the -- the roof -- these roof panels, the -- you know, the
4 ribs and the rises and the seams, those are all formed
5 prior to the Galvalume being placed upon the metal?

6 A. Correct.

7 Q. Okay. So, the -- the Galva- -- it's not the
8 Galvalume goes first, then the formation of the ribs
9 and -- and seams, it's the formation of the roof and seams
10 and then the Galvalume is put on?

11 A. Yes.

12 Q. If it was the opposite, if it was the Galvalume
13 went on and then it was formed, would -- would that
14 comment about, you know, that you were just being critical
15 of, would that -- would that have more merit to you in
16 terms of, you know, what does more harm, a hail dent or
17 a -- forming the -- the support groups?

18 A. Potentially, although the Galvalume -- the
19 bending process that is done in the manufacturing process
20 is different. It's a cold -- it's a cold bend is what
21 they call. And it's done over a period of time as opposed
22 to a very, very quick reaction that occurs when the hail
23 hits. It's an instantaneous as opposed to a slower
24 bending process, which will also cause fatigue to occur in
25 the hail hit location as opposed to the manufacturing

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1 process.

2 Q. All right. So -- but -- and again, it's that
3 cold forming that occurs before the Galvalume is applied?

4 A. Yes. And it -- and in the event that cold
5 forming for whatever reason in this roof was done -- I
6 don't know why it would be -- prior to the Galvalume,
7 that's a different bending process or mechanism than the
8 quick reaction that occurs when hail hits it.

9 Q. All right. And have you -- have you done any
10 studies done on these relative forces between hail impact
11 versus forming of the support groups?

12 A. No. But I know that having operated a brake in
13 the field -- a brake is a -- is a device that bends
14 metal -- having operating a brake in the field hundreds
15 and hundreds and hundreds of time in my career, I know
16 what happens when you bend any metal too quickly a brake
17 process.

18 Q. What kind of metal were you bending with the
19 brake?

20 A. What's that?

21 Q. What kind of metal? What kind of --

22 A. I've done -- I've -- I've done galvanized with
23 Galvalume. I've done galvanized without. I've done
24 copper. I've done aluminum.

25 Q. Were these roof panels or other things like

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1 gutters or things like that?

2 A. Part -- roof panels, gutters, flashing materials,
3 siding, components and cladding that go around and
4 integrate into siding. All of those things.

5 Q. All right. Now, when you say hail impacts are
6 observed on parapet wall, air conditioning unit and
7 electrical equipment -- and I believe we have photos of
8 that, and we'll go through -- but the electrical
9 equipment, is that -- are you just referring to the
10 spatter marks on the -- I think it's a fusebox by the
11 roof-top mounted units?

12 A. Yes. Spatter is not an indication, in my
13 opinion, of damage.

14 Q. Okay. All right. So, do you -- are you saying
15 that -- like that electrical box is damaged like dented
16 from hail?

17 A. No. It's -- it's got spatter on it indicating
18 that there was -- there was hail.

19 Q. Okay. All right. Not that hail caused any
20 denting or damage to that particular box, right?

21 A. Correct.

22 Q. All right. We -- you talk -- you talk next about
23 panel shift and panel separation. Now, you're referring
24 to the roof panels here, not the wall panels, right, not
25 the -- the tilt wall panels?

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1 A. Yes. This is under the roof section.

2 Q. All right. Now, you mentioned you got
3 demarcation -- measured demarcations up to 1 and a half
4 inches. I'm presuming that -- that you're -- you're
5 thinking someone took a tape measure and put it next to an
6 indentation and it measured, well, up to 1 and a half
7 inches? Is that what that refers to?

8 A. That would be typical, although in some instances
9 there may be another reference point that I can utilize
10 for that, a finger, a hand, something like that.

11 Q. All right. Because in your report, I think -- I
12 don't recall seeing any tape measure on the roof measuring
13 a -- an indentation. I see some finger points and some
14 arrow points but not a tape measure. So --

15 A. That is correct. I believe in this particular
16 instance because of the rain. I know Mr. Johnson when he
17 was down this last week did take some better photos of
18 areas that he circled -- he chalked, and those would be
19 representational of what we're saying -- seeing here.

20 Q. Okay. But as far as you -- when you wrote your
21 report, you did not have the benefit of Mr. Johnson's site
22 visit and photos, right?

23 A. But I have the benefit of my own site visit where
24 I saw, for example, the impact damage to roof that is
25 being shown with fingers pointing down to them. Those

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1 same areas were full of the brown pollutants when I was
2 there, and those were refilled with brown pollutants when
3 Johnson was there. They just weren't there the day of
4 this examination.

5 Q. Do you have a photo number that you would say
6 represents what you saw?

7 A. Page -- no, I don't because there's no -- page 14
8 there's a picture -- there's a picture pointing to fairly
9 large indentation.

10 Q. This is page 14 of the narrative -- I'm sorry,
11 not the --

12 A. Of the report, yes.

13 Q. Okay.

14 A. Of the report, yeah. So, difficult to chalk that
15 because it's raining.

16 Q. Uh-huh.

17 A. When I was there, those types of spots were
18 easily seen because they were filled with brown
19 pollutants.

20 Q. All right. But you don't have any measurements.
21 You're just eyeballing for the measurements?

22 A. Yes, based on my education, training and
23 experience.

24 Q. Yes, of course. All right. So, there we talked
25 about 2-inch hail, and I guess as we go through these

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1 photos, you'll indicate to me -- I'll ask you about what
2 size hail. So, we'll cover that. And then you talk about
3 they restrict water flow and collect debris. Now, I --
4 did you have a photo? Was there a photo from the site
5 visit the day everything -- where it was raining that
6 showed that any indentation was retaining water more so
7 than the rest of the roof?

8 A. Well, no, because the -- you can't draw a
9 comparison because the overall roof and the indentation
10 itself.

11 Q. Okay. Now, let's talk about this -- you call it
12 pollutants or collected debris. What -- what exactly does
13 that mean? What do you mean by that?

14 A. Well, we know that there is industrial pollutants
15 in every city, including this one. We know that those
16 industrial pollutants will cause materials that they're
17 exposed to to react in different ways. Asphalt shingles,
18 we'll see staining on the roof. We call it roof
19 pollution. On a metal roof like this, we will see inside
20 indentations where material will collect. Typically it
21 can be gray in color. It can be brown in color. It can
22 be -- it can change color on different days. Depending on
23 a rain event washing it out and then something else
24 happening maybe in a manufacturing process that -- that
25 release those pollutants, a dust storm.

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1 Q. Yeah.

2 A. The wild fires from California blowing this
3 direction, if they did, might contribute to particulate
4 matter that would look different than particulate matter
5 without a wildfire because of --

6 Q. How does the pollutants that -- I mean, the same
7 pollutants are going to be all of the roof whether it's in
8 an indentation or not, right?

9 A. Exactly ly.

10 Q. Right. So, tell me how the pollutants in a hail
11 indentation are more problematic than the rest of the
12 pollutants all over the rest of the roof.

13 A. Thank you for asking. If you take a look at the
14 photo on page 14 of 35, Bate stamped 002074 and you take a
15 look at the top photo where there is two fingers sticking
16 out on the right-hand side --

17 Q. Yes, sir.

18 A. -- or you scroll down and take a look at the next
19 one on the left hand where there is a single photo and you
20 can see the reflection coming back. All right?

21 Q. Yes, sir.

22 A. The issue is is that all around those photos --
23 and it's even more pronounced on the one on the right --
24 so, the second photo down on the right, you can see where
25 the indentations but then you can see all the way around

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1 those indentations above and below there are no
2 indentation marks. So, that would be an indication that
3 there is no visible evidence of damage to the Galvalume
4 coating at those locations. It's nice and shiny. I don't
5 any indentations. But then when I see the indentations
6 And Stolk confirms in their laboratory that the Galvalume
7 has been physically damaged by the hail, that's the
8 difference. That's when those chemicals which typically
9 are protected -- the metal is protected by the Galvalume
10 from those chemicals -- that's why it's put on there --
11 that Galvalume has now been compromised which allows those
12 chemicals to react to the metal causing the failure
13 mechanism.

14 Q. All right. Let me try to break this down to its
15 essential point. The -- putting aside the Stolk Lab
16 analysis, what are you seeing in these photos that makes
17 it look like that the Galvalume has been damaged to you?

18 A. There is nothing I can see in this photo that
19 tells me the Galvalume has been damaged.

20 Q. Okay.

21 A. So, I need to utilize the data from Stolk to put
22 that entire picture together.

23 Q. All right. So, far from the Stolk Lab, you can't
24 look at these photos on this face that we have here, I
25 believe in Exhibit 1, Brabo 2074, where the fingers are

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1 pointing at, you can't look at those photos and say there
2 is Galvalume damage in those locations, right?

3 A. No. What I can say is there are impact marks
4 that are consistent with hail that's been 1.25 and 1.5
5 inches.

6 Q. And when did that hail fall?

7 A. I believe that hail fell in 2017.

8 Q. And what makes you think that it didn't fall
9 after the 2017 storm and before your first visit -- you
10 say you were out there in July of '19?

11 A. Yes.

12 Q. Yeah. What about -- what about occurring between
13 those days?

14 A. Typically if it had happened in the 2017 event or
15 prior, for example, the spatter that I saw and it was also
16 taken by BCS, in my opinion based on the climate and the
17 location would have disappeared by then. Spatter doesn't
18 stay forever.

19 Q. Okay.

20 A. The spatter that I was seeing was more consistent
21 with the 2017 event. It was newer.

22 Q. Do you -- if this has spatter on this -- on these
23 pictures, you can see in these pictures, right?

24 A. No, not on these pictures but I'm talking about
25 the other -- the other indications. You know, counselor,

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1 we don't just look at one thing. We look at a collective
2 group of information to formulate these opinions. So...

3 Q. How long does spatter typically last on a metal
4 roof?

5 A. Depends on the environment. On a metal roof like
6 this --

7 Q. Yeah.

8 A. -- it can get washed up almost immediately. It's
9 really more an oxy- -- it's an issued with material that's
10 oxidized. But when they oxidize, you walk up to them, you
11 can put your hand on them and your hand will turn chalky.
12 So, that's what you have to look for. Is oxidation
13 present and if it's present, then spatter can occur. If
14 oxidation didn't present, spatter typically will not
15 occur.

16 Q. Well, at the time of your inspection, these roofs
17 were roughly 20 -- 18, 20 years old, right?

18 A. Yes.

19 Q. So, they had plenty of time to oxidize in that
20 time frame, right?

21 A. I don't believe on these roofs that's the case.
22 I believe on the other components around the roofs, that
23 is the case, but not on the roof itself.

24 Q. All right. Well, you can't --

25 A. Not to a great extent. There -- there was some.

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1 On this one we couldn't see it because it was raining.

2 Q. Right. So, we don't have a picture of a hail
3 indentation surrounded by spatter in your report, right?

4 A. Sure we do.

5 Q. Where?

6 A. On page --

7 Q. To the metal?

8 A. -- 15 of 35.

9 Q. To the metal roof?

10 A. No, not to the metal roof itself.

11 Q. That's what I meant. I -- I understand what's on
12 the utility box there.

13 A. Yeah.

14 Q. All right. Any -- any -- okay. And then in
15 terms of the pollutants, I take it you're saying that
16 the -- the -- there's, what, more pollutants gather in a
17 indentation than gather on the non-indented portions of
18 the roof?

19 A. Well, yeah, in fact, if you take a look at
20 Mr. Johnson's photos, that's very, very clear.

21 Q. Okay.

22 A. You see the brown -- the brown spots, that's what
23 I saw when I was there. Again, this is not evidence in
24 these photos because of the rain.

25 Q. All right. Well -- but the time frame from you

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1 being there to him being there is at least a year. So,
2 has there been some more aggregating of debris or
3 pollutants in these dents since your visits?

4 A. Yes, that is a dynamic and continuous process.

5 Q. Okay. And is it your opinion that this -- these
6 additional -- this additional collection of pollutants in
7 a dent as compared to the undented areas accelerate or --
8 or cause the -- the Galvalume to break down faster in the
9 area to rust or -- or create a hole faster than the rest
10 of the roof?

11 A. Only if the Galvalume is compromised in those
12 locations which is what Stolk confirmed.

13 Q. All right. And what does "compromised Galvalume"
14 mean?

15 A. It means the fractures in the Galvalume exposing
16 the actual metal itself.

17 Q. How do you determine --

18 A. So --

19 Q. -- between fractures caused by hail, allegedly
20 cause by hail, and fractures caused during the coating
21 process, manufacturing process?

22 A. Well, the fingers that are pointing on the page
23 that we were just talking about, 14 of 35, those
24 indentations are not caused by the manufacturing process.

25 Q. Right.

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1 A. There is lots of hail indentation.

2 Q. Right. But we have not looked at those under a
3 microscope. So, I'm talking about when Stolk identified
4 what they considered to be fractures, how do you know if
5 it's a fracture caused by hail, mechanical object or part
6 of the manufacturing process?

7 A. Well, again, I didn't harvest the samples.

8 Q. Okay.

9 A. So, the photos where the fingers are pointing
10 would be -- would have been indicative of a sample that
11 I would have taken and sent to Stolk. And then I would
12 have taken a sample -- so on -- on page -- go back if we
13 can. I want to be clear here: On page 14 of 35, starting
14 on the left-hand upper, 1, to go to the right, 2, go to
15 the next one, 3, Photo No. 4 in the center of that photo
16 is a fairly good impact that is discolored even though
17 it's raining. I would have taken a 6-by-6-inch sample
18 there. And then directly above that or towards the bottom
19 of that photo another 6 inches away where there is no
20 indentation, I would have taken another sample for a
21 background comparison.

22 Q. Let me -- let me just make sure I understand what
23 you're saying. I want to show you the -- what I think is
24 your -- what you're talking about. So, this would be the
25 middle row of photos, the right most photo?

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1 A. Yes.

2 Q. Where the hand is closer to the seam on the right
3 side of -- of the panel?

4 A. Yes.

5 Q. All right. You're saying you would have cut out
6 that what looks like an indentation there in the middle?

7 A. No, I would have taken the -- yeah, the one -- I
8 would taken the one in the center of the panel.

9 Q. Okay. And -- and how big is that? You're
10 talking about this indentation?

11 A. Yeah, I would have taken that right there.

12 Q. How big is that?

13 A. Well, I would have just -- all -- all I'm caring
14 about is the dark -- the dark circular area in the middle.
15 This panel right here is about 18-inches wide. So, the
16 overall light color that you see is probably 9 to
17 10 inches, maybe 12 inches long.

18 Q. This --

19 A. I would have taken -- yeah, I would have taken
20 the center of that -- that circle and I would have moved 3
21 inches in all directions and I would have marked it with a
22 Magic marker and then cut out a 6-by-6-inch template.

23 Q. Something like that?

24 A. Then I would have moved into the field where you
25 now have your little hand on here, and I would have cut

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1 another one where there is no sign of an indentation or
2 damage. And I would have asked for a comparison between
3 those two.

4 Q. All right. So, do you believe that this area
5 in -- that we're looking at here on this -- this photo is
6 a -- is a hail dent?

7 A. I believe the en- -- the en- -- not the entire
8 area. I believe the circular pattern in the middle is a
9 hail indentation, yes.

10 Q. Okay. And so, whoever took the photo, he was
11 more focused on this other mark here, kind of to the top
12 of the frame than he was this one?

13 A. Well, you have the benefit of -- yes, he's --
14 he's focusing on that but they're both there. He has the
15 benefit of -- of what he is seeing, looking straight down.
16 I have the benefit of looking because somebody else took
17 the photo of the entire cross section. I mean, I -- I
18 can't point on this. But right now if I were to draw
19 arrows, I would have one, two, three, four, five plus
20 where he's pointing, six, and possibly seven hail impacts
21 that I would identify on his photo.

22 Q. You see any indentations on this photo that you
23 believe are mechanical or installation related?

24 A. They don't look like it. They're all too
25 circular.

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1 Q. All right. So, all the indentations in this
2 photo you believe are hail caused?

3 A. I do.

4 Q. All right. I think I need to get out of that.
5 Sorry.

6 We were talking about pollutants and
7 collection of pollutants. Has there been any studies that
8 show that hail -- and maybe I asked you this and
9 apologize -- if a -- pollutants or debris collecting and
10 hail indents accelerates the -- the corrosion aspects of
11 the Galvalume or the underlying substrate and at what
12 speed compared to the non-indented areas? Do we know
13 anything like that?

14 MR. LUNDQUIST: Object as asked and
15 answered.

16 A. Yeah, the MCA -- well, in the MCA study talks
17 about that. Stolk, I believe, goes into some of that
18 detail as does the other lab that was used by the
19 insurance carrier. That's why they did the SCM. That's
20 the only reason they did the SCM sample was to look at
21 what are the actual components that were in the SCM, what
22 are the -- what are the compounds basically or elements.
23 That's the only reason they were doing that is to see are
24 any of these elements that would cause corrosion. And
25 some of those elements are.

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1 Q. (By Mr. Andis) And right. So, my question is
2 when is the -- the panels that have the indentations from
3 hail that are collecting the sediment and the pollutants,
4 when will they fail of their intended function to keep out
5 the elements?

6 A. I don't know that that's predictive. One of --
7 metal fatigue is -- is well studied in the literature, but
8 typically is studied with fasteners. For example, a screw
9 that has the threads will fail quicker than the same size
10 if you had the same thickness or same diameter of a nail,
11 for example, made out of the same material. Because of
12 those threads, it's going to be weaker at those threads.
13 So, metal fatigue at wells, metal fatigue at com- -- at
14 fasteners is well studied. The fatigue mechanism for this
15 type of a situation is probably not as well studied. And
16 that may be something Johnson can speak to better than I
17 can.

18 Q. All right. Well, are you comparing metal fatigue
19 with corrosion in terms of a corrosive -- the nature of
20 corrosion versus metal fatigue?

21 A. Well, certainly once metal fatigue happens and
22 you create cracks and striations in the surface coating or
23 the metal itself, it creates an opening for those
24 chemicals to sit and cause corrosion to occur.

25 Q. Is it your opinion that hail impact on the metal

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1 roof could -- starts a process of metal fatigue or
2 initiates a metal fatigue process?

3 A. Yes, I -- I -- yes, absolutely.

4 Q. And we talked about striations. But I don't
5 believe we have a photo of any striations on either of
6 these two roofs at least as of the time of your report,
7 right?

8 A. No. We have them on other roofs that we were
9 able to take close up and -- but the -- those striations
10 are visible on the Stolk report.

11 Q. Okay.

12 A. So, I will -- I will go on record as saying that
13 that is a misprint in this particular report because of
14 the rain.

15 Q. All right. Any wind-blown debris damage that you
16 observed at either of those two properties?

17 A. Not that we could separate out from -- from
18 anything else, no.

19 Q. All right.

20 A. Not obvious.

21 Q. All right. Any -- any evidence that the air
22 conditioning units or any of the mechanical units were
23 displaced or run off their pedestals during the May, 2017,
24 event?

25 A. No evidence of that.

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1 Q. All right. And when you tie what was seen
2 visibly with what Stolk reported, I'm having a hard time
3 connecting the dots because we don't have the photos of
4 the striations out in the field, and it seems like we have
5 a little bit of a gap here. You say that photos taken at
6 non-damaged areas did not have the same characteristics.
7 And I think we're talking about strain, hardening. And
8 this is consistent with testing performed by Stolk. I
9 guess what I'm looking for is do you have a field photo we
10 can compare to the Stolk photos and say this is what I'm
11 talking about on this --

12 A. No, and that's one of the prob- -- there's no
13 question that that is a gap. Typically what would happen
14 in these situations is that both parties would agree to go
15 out to the roof together. They would agree to harvest a
16 representative sample of what -- if -- if -- if BCS is
17 saying it's mechanical, then great. Give us three samples
18 of mechanical damage. If we say it's hail, we'll give you
19 three examples of hail. We'll pick a couple of neutrals.
20 We'll pick a couple of areas where there's no damage. And
21 then under chain of custody, we would send it all to the
22 same lab and we would get one report. That was not done
23 here. So, we have -- we have data that is skewed because
24 it is harvested from two separate entities at two
25 different times, and Johnson and I as experts do not know

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1 how that was done or what methodology was used to do that.
2 All we can do is look at the reports and comment on what
3 those say.

4 Q. Any evidence of rust in any indentation at the
5 Auburn roof?

6 A. No, because it was raining that day.

7 Q. Okay. Well, you can see rust when it rains,
8 right, if it's progressed far enough?

9 A. Oh, I see what you're -- no, there's no evidence
10 of surface rust. No, it's not -- you can get on some old,
11 you know, metal roofs and the whole thing is rusted. No,
12 we weren't seeing that.

13 Q. Okay. And did Mr. Johnson see any rust on his
14 recent inspection a couple of weeks ago that --

15 A. I'll let you ask him that -- I'll let you ask him
16 that question.

17 Q. All right. I mean that he told you about?

18 A. He said that there was clear evidence of
19 pollutants inside the -- that hail heads.

20 Q. All right. But he didn't mention the word "rust"
21 to you?

22 A. I don't believe so.

23 Q. All right. You say the roof assemblies on the
24 building were fully assessed. How much time do you think
25 you spent on each roof when you were there in July of '19?

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1 A. I probably was on each roof for about an hour,
2 hour and a half. I walked them. Observed things.
3 Occasionally stopped for five minutes to look at something
4 closer. One of the things I was also looking for was
5 potential panel displacement or uplift. When you walk on
6 a roof like this, if the panels have been disengaged from
7 the clip, the panel will flex differently when you walk on
8 then if it's fully engaged. Both of these roofs have a
9 feel of disengagement when I walked on them. And our guys
10 verified that as well when they were on it.

11 Q. And so, is there -- there's some pictures in here
12 of where the panel is disengaged from the clip like from
13 the underside? Can you see that?

14 A. No, we would have to dismantle the roof to show
15 those kinds of pictures.

16 Q. Are they marked or -- or flagged in any way so we
17 can confirm those particular areas?

18 A. Well, just a second. No, they're not -- we
19 didn't map those. It's just a general feeling that you
20 have when you're on the roof.

21 Q. All right. And then when your team went down and
22 took the photographs and did what they did, how long did
23 they spend on the roofs of each property?

24 A. I have two a shift. Typically -- I think we
25 broke up into two people per roof. I -- it was typically

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1 four to five hours.

2 Q. Per roof or building?

3 A. Yes.

4 Q. Per roof per building?

5 A. Somewhere in that range.

6 Q. Okay. Would we be able to get a -- an idea, just
7 looking at the time stamp on the photos, kind of give us
8 some idea of when the first photo was started, when the
9 last photo was taken?

10 A. Yeah, potentially.

11 Q. Okay. And, then, interior wise, how much time
12 was spent on the interior, including yourself, when you
13 were down there?

14 A. I was -- I don't know specifically. We don't
15 keep time records of that.

16 Q. Okay. Same thing, though if we looked at the
17 time stamp on the JPEGs, we would not be able to calculate
18 at least when the interior photos stop and start, right?

19 A. Yes, but that's not an indication of when the
20 inspection started or stopped.

21 Q. I understand.

22 A. A lot of times we will walk the entire roof first
23 and then we'll begin the photograph process and then we
24 will have potentially some additional note-taking or
25 things like that afterwards. So that's no indication --

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1 not a clear indication of how long we were there.

2 Q. All right. In the 3.1 section, rooftop damage,
3 you got a couple of photos. Looks like we're back on page
4 13 of 35, Brabo 2073 of Exhibit 1. This -- this first
5 photo on the left looks like a telephoto shot of the part
6 of the roof panels. Do you know who took this photo?

7 A. Well, it's not a telephoto shot. It's just a
8 regular shot. And it is -- I think in our raw photos, we
9 have additional photos of this. One of the four
10 inspectors. I can't tell you who. I may be able to tell
11 you by looking at the photo log because if this is -- this
12 should also be in the photo log and it would be initials
13 after that.

14 Q. I want to say SRD took the root photos at both
15 Auburn and JEF.

16 A. That's Scott Documb.

17 Q. Okay. And do you know what kind of camera he
18 uses?

19 A. We all use a Cannon -- what's it called? I got
20 it here. It's a Cannon. I know that.

21 Q. All right.

22 A. It goes up to 40x and 12 mega-pixels.

23 Q. Is that the Power Shot SX 620?

24 A. Might be, yeah.

25 Q. Okay. So -- all right. You don't believe that

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1 this photo is a telephoto or zoomed in shoot --

2 A. I do not.

3 Q. -- of the roof panels? Okay.

4 A. I do not.

5 Q. All right. Let me --

6 A. It might have been cropped to put it in here in
7 the top part.

8 Q. So -- the little -- tell me about that process.
9 So, do you take the raw photos and then drop them into the
10 report or does somebody else do that?

11 A. So, the raw photos are put into a Word document.
12 That is the photo reports that you've seen. And then we
13 take what we think is a -- an example of what we're trying
14 to show from the raw photo and drop it into this
15 particular report.

16 Q. And then in terms of sizing the photo and -- and
17 making it fit, is there -- do you do that when -- when you
18 do it, or is that a staff member that does that?

19 A. No, that would -- that would be me doing it. And
20 that would be per the ASTM E2128 guidelines, the American
21 Standard of Testing and Measures --

22 Q. Uh-huh.

23 A. -- which indicate in their protocol for
24 inspections that the person taking the photography should
25 attempt when presenting it to replicate what they're

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1 attempting to see. And you can do that by shading, by
2 cropping, by all kinds of things as long as you also
3 provide the raw photo which we have.

4 Q. Okay. Now, I want to try to do this. This will
5 be an experiment for me. So, please bear with me. The --
6 I believe this is -- from your digital files, I believe
7 that's the photo that appears in your report. Does that
8 seem right to you, on page 13 of 35?

9 A. Yeah, just a second.

10 Q. Sure.

11 A. One, two, three, four. Yes, the top is cropped a
12 little bit it looks like. It might be.

13 Q. All right. All right. And then if I --

14 A. Actually, no, it's not. I think it's the same
15 photo. I don't think it's cropped at all. I think that's
16 what happens -- that happens when you go from a JPEG to
17 a -- to a Word photo. It -- it will -- it will do that.
18 So...

19 Q. What does it do? It disturbs or --

20 A. Yeah, just changes a little bit. That's --

21 Q. All right.

22 A. -- why we give you the raw photo. In trial we
23 use the raw photos.

24 Q. Okay. Well, I -- that -- this is the raw photo
25 of --

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1 A. Right.

2 Q. -- 60 -- 6512.

3 A. Right.

4 Q. All right. So, then, if I go back to 6509, see
5 how that's more of a wide shot?

6 A. Yeah.

7 Q. All right. That's why I was saying it looked
8 like it was zoomed in where the depth of field was
9 collapsed and that -- because these are 40-foot panels,
10 right?

11 A. Yes.

12 Q. All right. So, when the panels look like they're
13 short, like these -- that to me looks like it's indent?
14 You don't agree with that?

15 A. Maybe it was zoomed in, but it's still showing
16 the damage. The only way we can show that damage is if we
17 zoomed in. Otherwise -- I mean, this is -- see, this is
18 misleading process that can happen in field inspections.
19 If you hold your camera correctly, you will show photos
20 that have no damage and you will represent in your report
21 that there is no damage. That's not what we were hired to
22 do.

23 Q. All right. So -- but you're saying that you're
24 looking at the same area on the roof between these two
25 photos, 6509 and 6512, which is the image file name, and

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1 you can't see the damage on the wide shot but you can see
2 the damage on the zoomed in shot?

3 A. You can see it on the wide shot if you look. If
4 you know what you're looking for, you can those -- those
5 crosshatch lines in the distance.

6 Q. Okay.

7 A. But we --

8 Q. You talking about these lines, these --

9 A. Yeah.

10 Q. -- these little horizontal lines?

11 A. Yes. We didn't -- but you also can't see the
12 panel distortion in this photo. So, we start off big and
13 then we get small to show -- that was my -- this is what I
14 was talking about before. These roofs were designed so
15 that the amount of wind that hit them would not cause them
16 to blow off. They were not designed and -- on the
17 building codes at the time to not be damaged by wind.
18 There is wind damage.

19 Q. So, you're saying that oil canning is caused by
20 wind damage?

21 A. Severe oil canning like this is, absolutely.

22 Q. Okay. Is oil canning always caused by wind
23 damage?

24 A. No, no. You can oil canning the day the roof is
25 put on.

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1 Q. Uh-huh. I mean, it's just -- it's the -- it's
2 the result of residual stresses on the -- on the panels,
3 right?

4 A. Yes. But those stresses can also be induced by
5 wind.

6 Q. All right. How does that happen? What -- in
7 what -- what documentation do you have or scientific basis
8 do you have for that that supports that?

9 A. That is based on my training as a building code
10 official on components and cladding requirements that are
11 now in the building codes and are now being strengthened
12 in 2022 codes that are gonna be coming out. These are --
13 these are actually coming directly from the American
14 Society of Civil Engineers, ASCE, which is referenced in
15 all of the building codes now and started being referenced
16 in 2000 before this building was being built. So, the
17 issue before was let's design it so it doesn't blow off.
18 The issue now is let's design it so that not only doesn't
19 blow off but it -- it doe -- it performs and isn't
20 damaged. And so, we now have much higher specifications
21 and tolerances.

22 Q. And -- and so, all of the -- what you see would
23 be perpendicular to the seams, those lines that run
24 perpendicular to the scenes, all of that you consider oil
25 canning?

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1 A. Yes.

2 Q. And all of that you say was caused on May 21st,
3 2017?

4 A. Not necessarily all of it.

5 Q. Okay. Can --

6 A. What concerns me more -- and it doesn't show in
7 this picture. What concerns me more is the -- the closeup
8 picture showing the panels that are shifted. Right there.

9 Q. Okay.

10 A. That's -- that's very concerning to me.

11 Q. All right. So, the kind of the moving off to the
12 right that we see?

13 A. Well, not moving off to the right, but the
14 very -- so, right above the 10/16/19 --

15 Q. Yes, sir.

16 A. -- that -- that next panel, that next length,
17 it's actually bent. It's swoop. There's been a swoop in
18 it.

19 Q. You're talking about to --

20 A. And that --

21 Q. -- the right or to the left of the --

22 A. It swoops to the right. Right there. Yeah,
23 that --

24 Q. Right here?

25 A. No. Keep going to halfway down. Right in there,

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1 that -- that whole panel swoops to the right. But then
2 the panel -- the next panel over, it swoops the other
3 direction. That is very classic movement of these panels.
4 They're not designed to do that. You can't install a
5 panel in the field and have it do that. It's impossible.

6 Q. So, you're saying that the seam on the right
7 swoops to the -- you say right?

8 A. Yes.

9 Q. And the seam on the left swoops to the left?

10 A. No. The next one down swoops to the right.

11 Q. Down toward the end of the building?

12 A. Yeah.

13 Q. Okay.

14 A. So, that one -- that -- that second one in is
15 bent.

16 Q. All right. And you think that's related to the
17 storm?

18 A. Well, certainly would be consistent with the
19 strong winds that happened.

20 Q. All right. Well, would it be consistent with
21 installation issues, too?

22 A. You could not install a roof and make it look
23 this way. It's impossible.

24 Q. So -- but we can't see it on the wide shot,
25 right? Can't really see that?

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1 A. Correct.

2 Q. And then let me show you something.

3 A. I'll also indicate that down in this area, those
4 panels are loose when you walk on them. So, they are no
5 longer attached to the fasteners.

6 Q. All right. So, you believe they become displaced
7 from the clips?

8 A. Yes.

9 Q. Okay. Can I -- can you see that picture or is it
10 the same one still?

11 A. Same one.

12 Q. Oh, I'm sorry. All right. This is a photo that
13 Mr. Spiekerman took on a recent inspection, pretty much
14 from that same area. Do you still see the oil canning and
15 the panel shifting in this photo?

16 A. You can see some of it, a little bit. I'd want
17 to probably get the raw photo and blow it up. But, again,
18 that's one of the advantages that we have that
19 Mr. Spiekerman did not have is having the roof be wet
20 really allows you to see that much, much better. So,
21 while we had a disadvantage of not being able to see
22 residue built up in the indentations from hail, we could
23 see the hail indentations better and we could also see the
24 distortions in the roof better because they were magnified
25 by the rain.

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1 MR. LUNDQUIST: Hold on just one second,
2 David, I apologize to interrupt. When you say at recent
3 inspection, are you talking about his August, 2020, the
4 one last month?

5 MR. ANDIS: Yeah, whenever that was, the
6 court ordered one.

7 MR. LUNDQUIST: Okay. But we -- those
8 photos haven't been produced. With all due respect, I'm
9 not going to allow you to address this witness with any
10 photos that haven't been produced in this litigation.
11 That's -- that's highly inappropriate, so.

12 MR. ANDIS: You can object. I'm still gonna
13 show him what I'm gonna show him.

14 MR. LUNDQUIST: Okay. Well, I'm gonna
15 instruction the witness not to answer any of those because
16 then --

17 MR. ANDIS: Oh.

18 MR. LUNDQUIST: -- you're asking a witness
19 to opine on something that has not been produced in this
20 litigation.

21 MR. ANDIS: All right. So, the fact I just
22 got them Tuesday of this week gives plenty of time for --
23 for me, but the fact that I'm showing him now, he can't --
24 can't comment on them?

25 MR. LUNDQUIST: To the -- showing him on the

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1 day of his -- showing him on the day of his deposition,
2 you know --

3 MR. ANDIS: Okay. All right. So, we'll
4 make a record and go from there.

5 MR. LUNDQUIST: Right.

6 Q. (By Mr. Andis) With respect to oil canning, the
7 MCA roofing manual does have a section on that, right?

8 A. Yes, it does.

9 Q. And it doesn't actually address wind-caused oil
10 canning, mostly installation, manufacturer based oil
11 canning, right?

12 A. Yes, that was the wind-induced oil canning issues
13 and the distortions are not addressed in that document.
14 They should be. And --

15 Q. All right.

16 A. -- no question about it.

17 Q. All right. So, with respect to the oil canning
18 that's caused -- not wind caused, the MCA makes it sound
19 like that this has no affect on the structural integrity
20 or water -- I guess weather tightness, water proof-ness of
21 the panels. How is that different than the oil canning
22 that you're calling out caused by wind?

23 A. Panels are loose. I've got panel shift that has
24 caused the oil canning to be worse.

25 Q. What is the mechanism that actually causes the

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1 roof panels to dis -- detach from the clips during the
2 wind event? How does that actually work and what's going
3 on?

4 A. Well, the panel -- like any fastener, the day
5 it's installed is going to be -- when it is going to -- if
6 it's installed correctly, it's going to be its most
7 robust. As the fasteners get older, that amount of
8 robustness will also decline potentially. At some point
9 in time if the wind load on the building, not the wind
10 speed, but the wind load exceeds the tolerance of that
11 individual fastener, then the panel will lift and
12 separate.

13 Q. With --

14 A. The only way to define that would be to test
15 every single fastener in the field, which would be more
16 expensive than replacing the roof.

17 Q. Where does the panel detach from the clip? Does
18 it detach at the purlin, does it detach at the seam?
19 What -- what part of the clip and the -- separates?

20 A. Both. It could be both. It could be -- it could
21 be at the purlin, and it could be at the seam.

22 Q. Okay.

23 A. Typically it's one or the other and not both.

24 Q. Is the clip actually breaking or is it being
25 pulled through the purlin?

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1 A. Sometimes it could be pulled through the purlin.
2 Sometimes it can be -- it can detach at the actual seam.
3 It -- you don't know until you -- you have to inspect each
4 individual fastener.

5 Q. All right. But what I guess I'm trying to
6 understand is the mechanism here. So, if the clip is
7 actually included in the seam, in the crimping of the
8 seam, does it pull through the seam intact or does it
9 break off at some point and part of it stays with the seam
10 and the rest of it is kind of floating there over the
11 purlin?

12 A. I've seen all three based on inspections that
13 we've done. But that's a much more detailed inspection
14 than -- than was done here. That requires getting a
15 scissor lift on the inside or a man lift. Okay? It
16 requires cutting back all of the insulation and doing
17 very, very close inspection.

18 Q. All right. On your report, the next photo on
19 page 13 is a photo of, I believe, a parapet, the top of a
20 parapet. And you say hail impact on the roof parapet.
21 What are you referring to?

22 A. There -- and this isn't a great photo.

23 Q. Tell you what I'll -- I'll share my photo. Then
24 we can all see the -- the same thing.

25 A. Yeah.

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1 Q. All right. Do I have -- did it get it up for
2 you?

3 A. Just a minute. Yeah, there you go. I -- it's
4 not the three dots. I believe right by the three is a
5 crow's foot. Right underneath the letter three, you'll
6 see kind of a -- a V. I believe that's the crow's foot
7 from a hail impact. Yeah, right there.

8 Q. Right there?

9 A. Yeah.

10 Q. Okay.

11 A. Yeah.

12 Q. All right. What are these three dots?

13 A. They're two -- I don't know what they are. I
14 don't think it's hail.

15 Q. Okay. You think bird poop or something?

16 A. Could be, yeah.

17 Q. Okay. All right. So, the rulers kind of
18 obscuring what you believe to be a hail mark?

19 A. Yeah. And in our raw photos, I think there's
20 some better examples of where it actually chipped some of
21 the concrete.

22 Q. All right. And so, you're saying the hail
23 actually chipped the concrete, not the paint, not just the
24 paint layer or a paint layer, but actual oxidation or
25 whatever's going on, but actually dug into the concrete?

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1 A. I believe we have some photos of that. I know we
2 do on some of the buildings. I can't tell you without
3 looking at all of our photos on this one.

4 Q. Okay. All right. Let's go -- I think I'll just
5 keep this up. We'll go to the next page. You've got this
6 top left photo which is on page 14 of 35, Brabo 2074.
7 What are we -- what are you looking at there, where it
8 says "no panel displaced?"

9 A. Yeah, so, the panel -- oop, I lost it. Where was
10 it?

11 Q. I'm -- I'm sorry. I must have hit --

12 A. There it goes.

13 Q. Okay. Sorry.

14 A. So, the panel on the -- on the left-hand side,
15 you will see a new fastener. All right? That's a brand
16 new fastener that's been put in right there. On the
17 right-hand side you will see where the fastener has
18 literally been pulled through the metal. It's kind of
19 obscured by the date stamp. Too bad the date stamp is
20 there, but you actually -- it actually sheared the metal
21 when the panel shifted downward and then the other
22 fastener is sheared off as well. And what we have is a 1
23 inch -- I think we're trying to measure this. So, let's
24 see. It's about a 1-inch shift from where the panel was
25 originally sitting. You can see the clear, clean

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1 Galvalume, galvanized material with some sealant
2 underneath. The panel shifted downward, and they put a
3 temporary repair in. That would clearly be a potential
4 source for water getting into the roof, depending on how
5 much overlap is still left underneath there.

6 Q. So, you think this separated and somebody came
7 back in as a form of repair and added the screw on the
8 seam?

9 A. Yeah, that screw is different than the other
10 screws that we saw.

11 Q. All right. And you see that there's been
12 attempts to put sealant and repair that at least --

13 A. No, that's not what that is not. That's where
14 the -- that's where the panel was originally in place and
15 that was the sealants that were installed when the panel
16 was installed.

17 Q. And then the butyl tape that goes in between the
18 end-laps of the panels during installation?

19 A. It could have been the butyl tape. It could have
20 been a -- a spot -- they could have also just used a spot
21 piece of tar. But, yeah, that -- that basically has
22 pulled away. I believe that's all original. That's not a
23 repair event.

24 Q. How far away is it pulled, you think?

25 A. Well, looking at the tape measure, it looks like

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1 it's about a half inch, maybe five eighths -- five eighths
2 of an inch.

3 Q. All right. And which direction did it go? Did
4 it go toward the 1 of the tape measure or toward the 3 of
5 the tape measure?

6 A. We think it shifted towards the 1.

7 Q. So, the upper panel? That's the upper panel,
8 right?

9 A. Yes.

10 Q. You believe it pulled back from its original
11 alignment and shifted?

12 A. Just a second. I'm looking at the tear on the --
13 on the bolt on the right. So, tear -- no, the bottom
14 panel might have torn. Okay. It -- really focusing on
15 that bolt on the right that is torn. Yeah. Panel
16 shifted. I can't tell you looking at this photo which
17 direction.

18 Q. Why don't I do this. See if it helps. I think I
19 found the original JPEG photo. Yeah, because there -- the
20 topside -- we need to rotate it. So, I'm going to rotate
21 it to match what's in your report. Are we good there?
22 It's photo 6545?

23 A. Yeah.

24 Q. All right. So -- and I can zoom in on an area
25 for you so you can see how kind of -- how to answer the

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1 question of what panel was shifting and how far?

2 A. No, that's not going to help me. But, honestly,
3 I don't care. You can see the remnants of the tape here
4 over on the left-hand side of the tape measure. Yeah, you
5 can see the remnants. There's the remnants right there of
6 some of the tape.

7 Q. All right.

8 A. Yeah, to me it wasn't important which panel
9 shifted. The mere fact that they did shift, that's a
10 pretty consistent -- that's a pretty dramatic shift.

11 Q. And you think the screws -- not the one on the
12 left but the two -- one in the -- kind of in -- by the
13 tape measure and the one on the right side, those are
14 original to the installation?

15 A. Yes.

16 Q. All right. And if the -- the panel shifted,
17 wouldn't those screws have wallowed out or maybe even
18 sheared as a result of the movement?

19 A. Well, we think the one on the right did.

20 Q. The one that's still there, you think it --

21 A. Yeah.

22 Q. -- was just loose, it's not even connected to
23 anything?

24 A. Correct.

25 Q. Okay. Do you have a picture of that that shows

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1 that it -- it sheared?

2 A. No.

3 Q. Okay.

4 A. No.

5 Q. And then with respect to the -- the screw head by
6 the number one, how does that evidence that the panel
7 moved?

8 A. The screw is bent. I don't know if you can tell
9 that it's kicked upward? You can't -- it's impossible to
10 install a screw in a bent position. The drill won't allow
11 you to do that.

12 Q. You mean during installation the -- the guys --
13 it's not possible for them to drive a screw in at an
14 angle?

15 A. Not -- no, I didn't say at an angle. It's a bent
16 screw. You can't -- if you tried to install a screw that
17 had a bend in it, the rotation would literally rip your
18 arm off if the screw was strong enough and the drill was
19 strong enough.

20 Q. Where is the bend? I'm sorry. I'm not seeing
21 it.

22 A. Well, you can't see it. You have to -- it is
23 lifted -- it is -- it is tilted to the left. I do not
24 believe that it was put in at an angle. I believe that
25 it's distorted because of the panel movement.

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1 Q. And you -- and when do you think this happened?

2 A. When the panel shifted.

3 Q. Which was when?

4 A. May 21st of 2017.

5 Q. All right. Go back to your report. Looking
6 at -- oh, I'm sorry. All right. Looking at the second
7 photo now, on page 14 of 35, Brabo 2074, second at the
8 right top, those are the two fingers. We were looking at
9 these earlier, right? These are the ones we were looking
10 at?

11 A. Yes.

12 Q. Pointing out what you believe to be hail
13 indentations?

14 A. Yes.

15 Q. All right. And you think that -- is that two
16 indents right next to each other in a line at the top
17 right?

18 A. Yes.

19 Q. You think that's from the same hailstorm or
20 different hailstorms?

21 A. Likely the same hailstorm.

22 Q. Okay. And then the picture below it, we talked
23 about that large spot that you would have taken a cut
24 from. But with respect to the -- what it looks like the
25 finger's pointing at, does that look like a V shaped

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1 indent to you?

2 A. That's how it's presenting on the photo, but what
3 really looks to me is that -- and I can't circle here, but
4 it looks to me that the indentation is -- if you move your
5 cursor over on to it, go up -- go to the right. Right
6 there is your indentation. Right there.

7 Q. All right. So, what we see that's on --

8 A. That's a shadowing affect that you're seeing.

9 Q. You think this is an artifact, the photography
10 that we're seeing?

11 A. Just like the artifact in the middle with that
12 large area, yes.

13 Q. Okay. So, if we all got up on the roof and
14 looked at it today, if we could find this spot, it
15 probably wouldn't -- you're saying it wouldn't look like a
16 V shaped?

17 A. No.

18 Q. Okay.

19 A. And -- and honestly what I suggested to counsel,
20 is that for trial we will probably want to go out there
21 ahead of time and harvest the larger sections and bring
22 them to the trial so the jury can see these indentations
23 for themselves, both dirty and then in the process of
24 being washed out. So, they can examine this and see this
25 for their own eyes.

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1 Q. Bottom left photo where it says impact damage to
2 roof, let me zoom in. And can you kind of direct my
3 cursor where you think the impact -- and you're talking
4 about hail impact, right?

5 A. Yes.

6 Q. Okay. Let me just start with the kind of middle
7 right.

8 A. Good job. You should -- you know what, you --
9 you are now a hail investigator. Good job. You nailed it
10 on the first try. There's one.

11 Q. All right. And then coming down a little bit, is
12 that one?

13 A. Go back up. Up on the top, right above that one.
14 Keep going. Keep going. Keep going. Right there. There
15 you go. There's one. Go straight to the left. Yeah, the
16 other way. Yeah, my left. Go towards the middle of the
17 panel in a straight line. Right there. There is one.
18 Coming out on the row. Come down at a 40 -- 45-degree
19 angle, there's one right in the middle there.

20 Q. 45 to the right like this?

21 A. No. The other direction.

22 Q. The other 45?

23 A. Right. Yeah. Keep coming, keep coming. Keep
24 coming down. Go back to the right a little bit. Right
25 there. There you go.

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1 Q. This is another?

2 A. Yeah. There's a larger one up just on the edge
3 of the photo, up on the top -- yeah, right there.

4 Q. Okay.

5 A. Those are some examples.

6 Q. Okay. What about -- this is a dent that -- down
7 here toward the -- the bottom of the frame on the left
8 side, these two kind of circular areas?

9 A. Can't tell from this photo.

10 Q. So, we got one, two, three, four, five dents in
11 this photo?

12 A. Five or six, yeah.

13 Q. Okay. Any others that you can see at least
14 opposite --

15 A. Not on this photo. Might be able to on the JPEG.
16 but, yeah, no.

17 Q. Okay. Okay. So, photo -- the AC condensing
18 unit, do you know how long that particular unit has been
19 out on the roof?

20 A. I think that one was 2004. I know there's
21 some -- we took dates -- we took pictures of all the air
22 conditioners. So, we would be able to tell you the dates
23 on every one of them.

24 Q. And can you tell me if the unit has been struck
25 by one or more hail events?

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1 A. Yes, it certainly looks like it.

2 Q. The multiple -- condensing fans are pretty
3 good -- pretty good kind of telltale indicators of
4 multiple events, right?

5 A. Yes.

6 Q. Both in terms of size and direction?

7 A. Yes.

8 Q. And depending on how long they've been out and
9 usually you can figure that out by a tag that's on the
10 unit. You might be able to have a pretty good educated
11 guess as to how many times hail has fallen at the property
12 since the installation of the unit?

13 A. Potentially, yes.

14 Q. I mean, obviously there is a hail guard or
15 something like that, that's not going to help, depending
16 on the nature of the hail guard. But in this case,
17 there's no hail guard on this particular unit, right?

18 A. Correct. My concern was not with the needing to
19 replace these because of hail damage. My concern was that
20 these needed to be replaced when they are detached to do
21 the roof. You can't reinstall them because they don't
22 meet the current energy code.

23 Q. I got you.

24 A. That's --

25 Q. So, you're -- when you estimated on the --

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1 your -- you did the exact -- I'm sorry. You said someone
2 else did the Xactimate. You just -- you reviewed it,
3 though, and I guess signed off on it?

4 A. Yes. I edited it, reviewed it and approved it.
5 And I added the air conditioners specifically for the code
6 reason.

7 Q. All right. Not for damage but from code?

8 A. Oh, they're damaged. But honestly I don't care
9 about that point. That's why we took the pictures of the
10 age -- age stamps on them.

11 Q. All right. Next page, we're on page 15 of 35.
12 This is that electrical -- I think this is the electrical
13 box.

14 A. Yes.

15 Q. All right. So, what -- what are you identifying
16 and what are you calling spatter on this box?

17 A. Well, if you go around the left on the side of
18 it, yeah, right in there and then up -- up higher.

19 Q. Like on the top part.

20 A. No, on side towards the edge, right towards the
21 edge of the -- the other side. Okay. Right there,
22 there's a nice stripe coming down.

23 Q. Uh-huh.

24 A. Up on the top we have a couple of demarcations
25 that could be potentially spatter. There's one -- yeah,

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1 there's one there. On the very top of the air conditioner
2 is an actual indentation. Right there.

3 Q. Okay. Do you know when that occurred?

4 A. We think -- we think it was with this storm.

5 Q. Okay. Well, what I mean you got multiple hail
6 events that happened to the AC unit right next to it. How
7 can you determine when that dent happened and which hail
8 event caused that one versus something else?

9 A. With the rain on it at that point in time, you
10 couldn't necessarily, so.

11 Q. All right. About how big is this spatter that
12 we're seeing on this utility box by the AC unit?

13 A. It's hard to tell with the ones that are doing
14 the glancing blows on the side because you're only picking
15 up a part of that. The one there on the top, the largest
16 of the ones is probably .75 to 1 inch.

17 Q. You talking about spatter, I'm sorry, or the
18 indentation?

19 A. The spatter.

20 Q. Okay. So, like this spatter you think it's .75?

21 A. .75 to an inch, yeah.

22 Q. All right. And then we talked about -- we
23 already talked about the seaming.

24 A. Yeah.

25 Q. On the replacement panels. All right. Now,

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1 we've got -- this is page 1635, Brabo 2076. Did you put
2 these arrows in or did somebody else do that?

3 A. You bet I did. And you can also see the water
4 drops from the rain in the photo.

5 Q. Is that what all these little spots are right
6 here?

7 A. No. Go over to the -- the round circle.

8 Q. So, this right here?

9 A. Yeah, that's a -- that's a water drip. So,
10 there's -- there's water flowing down this panel right
11 now.

12 Q. All right. So, is this water from the sky that's
13 made this circle?

14 A. Yeah. Yes.

15 Q. Like you've seen those water drops in slow motion
16 and how when they hit water and they spread out and make
17 ring? Is that what this is?

18 A. Yeah, we're catching that in a number of
19 locations on this photo.

20 Q. Okay. All right. So -- but the point of
21 interest for the arrows would be these particular areas, I
22 guess; and you're gonna call those hail dents?

23 A. Yes.

24 Q. Okay. And then even though they look very linear
25 to me -- see how they have like they have a line?

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1 A. That's the distortion of the camera.

2 Q. All right. So, that's camera distortion. And
3 when do you think those hail dents occurred?

4 A. I think they're part of the 2017 event.

5 Q. All right. And how big was the hail that caused
6 those indentations?

7 A. We pegged the hail on this site between 1.25 and,
8 I believe, 1.50.

9 Q. Okay. So, it seems like we've got like a little
10 cluster right here. Do you -- do you know why hail would
11 have fallen in a little cluster here and then we basically
12 don't have anything over here on this side?

13 A. Oh, I'll answer it this way: I was blessed with
14 having a ex-father-in-law who was a farmer and when his
15 crops were planted, he did crop inspections for insurance
16 companies for wind and hail damage. And we would go out
17 and look at large fields where on an 88-acre field, you
18 would have one corner where there'd be a nice half circle
19 of the crop damaged by hail. There'd be nothing for
20 200 yards. And then you'd have almost a straight line
21 right down the middle. And then there'd be a -- nothing.
22 And then in 20 yards later, there'd be a small spot that's
23 a 10 foot perfect circle, almost like a -- an alien had
24 put it there. And then you'd see in a different location
25 something that looked more like a triangle. So, hail

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1 falls in random patterns. And this would be an indication
2 of that.

3 Q. You said earlier these panels are approximately
4 18-inches wide?

5 A. Yes.

6 Q. Okay. All right. So, you're saying in this
7 photo that's here on page 16 of 35 that the arrows at the
8 top, that this would just be a small cluster of hail and
9 it didn't happen to fall in the next foot or 2 foot around
10 it, just in --

11 A. Well, no, I'm not saying that at all. I'm saying
12 that I'm not -- I don't have the other -- I don't have the
13 3 feet above this and the 3 foot below that to reference
14 that. This is what I have to work with here on this
15 photo.

16 Q. Okay.

17 A. That is representing to me hail damage. All
18 right?

19 Q. And are these hail dents retaining any water
20 based on these photos?

21 A. I can't tell in this case. There's too much
22 water on the -- on the surface.

23 Q. Is this dangerous for the guys to be on the roof
24 during a rain storm?

25 A. Only if there's thunder. It's -- it's a low

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1 enough sloped roof that we're not worried about slip and
2 fall.

3 Q. And then, again, the bottom, further on 16 of 35,
4 four more hail indentations?

5 A. Yes.

6 Q. Okay. I believe I'm on the top photo of 17 of 35
7 which is Brabo 2077. Now, you're saying here "typical
8 wind uplift and hail damage"?

9 A. Yes.

10 Q. Is the -- all the arrows pointing to the hail or
11 wind or both?

12 A. For some reason in this photo it says blue arrows
13 and they didn't get differentiated, but the panel uplift
14 is at the top. So, what's happening here is that is about
15 a foot back from the edge of the panel. The edge of the
16 panel is -- has one, two, three, four, five, six fasteners
17 that screw through both panels and presumably into a
18 purlin. And what happens typically is if those don't give
19 way when there's wind uplift, the panel has to compensate
20 somewhere else. And in this case it looks very clear to
21 me that it compensated about a foot back. Had those
22 fasteners not held, then the entire panel would have blown
23 off. That is fairly consistent wind damage that somebody
24 else might look at and say, oh, that's oil canning. And
25 that's not oil canning.

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1 Q. All right. So, let me just be clear, the arrows
2 that are down here at the bottom of the photo, one, two,
3 three, four, five, that -- that you believe is hail,
4 that's not wind, right?

5 A. Correct.

6 Q. Now, is this an indentation over here to the
7 right? Is that anything?

8 A. Don't know. I'd have to walk on the panel.
9 There were plenty of examples like that where that area
10 is -- is -- is lifted. You walk on it and it compresses
11 down. That may have been one of those areas.

12 Q. All right. So, to talk about -- let's talk about
13 this area that you say is wind uplift. At the end of this
14 panel, what's this next thing at the -- I'm sorry, it --
15 it's cut off in the picture.

16 A. So that's a panel.

17 Q. Okay. So, you don't think that's a skylight?

18 A. I don't believe so. I think that's the next
19 panel. And that's a panel. That's where the panels
20 overlap.

21 Q. All right. And so, at the -- at each panel end
22 lap -- we call it an end lap?

23 A. Yeah.

24 Q. Okay. There are screws and you -- you count, I
25 believe, six, five or six?

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1 A. Well, counting the ones that are on the -- on the
2 seam.

3 Q. On the seam.

4 A. The lifted seam as well. So, yeah.

5 Q. All right. And you believe that those screws go
6 from the top panel through the panel that's underneath it
7 and screw into the -- the purlins which is part of the
8 frame in the building?

9 A. Ideally that's what should happen, yes.

10 Q. Okay. And then why is there a screw in the seam?
11 Do you know? I think we got two screws in the seam.

12 A. Well, I just -- you see that in older -- that --
13 that has been taken out of newer designs for this type of
14 roof. That would be consistent with a circa 1990s
15 standing seam roof. That was an area where they added --
16 in some cases the roofer would add an additional fastener
17 per the manufacturer to help hold that together. So --

18 Q. And then the wind uplift occurs you're saying
19 because the panels, I guess, are attached to the purlins
20 and, what, they vibrate and they're -- they -- they're
21 pulled and that's creating the stresses because the
22 purlins aren't moving?

23 A. Well, the wind moves underneath the -- the wind
24 moves underneath the metal -- it moves across the top and
25 it the moves underneath. So, you get uplift and you get

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1 suction depending on where you are in the roof and what's
2 happening at that -- that moment. You can have both
3 happening at the same time. What happens is something has
4 to give. So, this is an indication to me that this roof
5 began to detach, the earliest stages of failure were
6 occurring and the wind stopped before it detached. And it
7 left the remnant of that damage with this crease going
8 across here.

9 Q. Okay. So, I understand the wind blowing over the
10 top. How is the wind getting into the building to create
11 the -- what, was it -- is it a suction from underneath?

12 A. Yeah, at the edge of the building. This is not
13 an airtight building by any means.

14 Q. Okay. So, do you have the same amount of wind
15 inside the building that you do outside the building?

16 A. Well, when you don't, you have problems. So,
17 yes, ideally you want to have a balance to some extent.
18 And when that balance is -- is off, that's when you -- it
19 will manifest itself in some of the components in the
20 play.

21 Q. Okay. Well, maybe I'm -- I'm probably not asking
22 it very clearly. If --

23 A. That's -- yeah, that's during the event itself.
24 That's not during every day --

25 Q. Understand.

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1 A. Everyday occurrence.

2 Q. So, if during the event, if there were
3 90-mile-an-hour winds blowing, those are blowing across
4 the top of this roof, right?

5 A. Yes, creating a suction and an uplift.

6 Q. And then were also 90-mile-an-hour winds inside
7 the warehouse underneath these panels?

8 A. No, otherwise you would have blow off -- no,
9 there wasn't.

10 Q. Okay.

11 A. That's not what I was trying to say?

12 Q. Yeah, that's -- that's what it sounded like. So,
13 can you explain it again? Use the -- if you don't mind,
14 the 90-mile-an-hour wind speed as sort of maybe a
15 reference for me.

16 A. Sure. The wind -- the 90-mile-an-hour wind blows
17 across this roof creating an uplift suction. It -- it's
18 what allows airplanes to get off the ground basically.
19 So, it come -- imagine this as a wing. It comes across
20 that wing. It creates turbulence. Depending on the
21 degree of turbulence, you can have that component or
22 cladding, which in this case is the metal roof, react to
23 that. And it becomes overstressed and that stress will
24 manifest itself in this type of event.

25 Q. But what forces are operating underneath the roof

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1 panels during that 90-mile-an-hour wind?

2 A. Well, you have restraints from the fasteners.

3 Q. Okay.

4 A. So, it's trying to hold it down and not allow
5 that to happen.

6 Q. All right. And that's the fasteners where
7 they're attached to the purlins? They're sort of the --
8 the strong point?

9 A. Well, that -- the clips that are on either side
10 in the upper-raised rib areas. And then the actual
11 crimping of the metal to itself. So, you have all of
12 those mechanisms working together to hold this roof in
13 place. And it worked. The roof didn't blow off.

14 Q. All right. And -- but -- but so, there's no wind
15 coming inside the building during this event?

16 A. Not -- not a proportional amount, no.

17 Q. Okay.

18 A. There's always -- there's always some air
19 movement in the building from the exterior on these types
20 of warehouses.

21 Q. All right. So, that's -- this is the one area
22 here at the very soft of top and the middle, middle panel
23 where it meets the next panel, that's uplift that you are
24 identifying?

25 A. Yes, that's an example.

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1 Q. All right. Then we've got in this -- this --
2 another one of these pictures at the bottom of page 17 of
3 35. And again these are 40-foot panels, right, from end
4 to -- roughly, end to end 40-foot panels?

5 A. Yes, they are.

6 Q. So, assuming that the winds cuts off hear at end
7 lap, we'd be basically looking at two panels, a total of
8 80 feet?

9 A. I don't think that's the case here. I think
10 that's -- I think that last panel section is about
11 10 feet, if I recall.

12 Q. So, this last row of panels from left to right
13 across the building at the back, you think is about 10
14 foot?

15 A. It may be. I just -- I don't know. I'd have
16 to -- I'd have to -- I can't recall.

17 Q. I mean, does it make a difference, whether it's
18 10 foot or 40 foot?

19 A. Well, if it's 8-foot, for example, that might be
20 a location of a purlin. So, if there's no purlin,
21 depending on how the building's designed, if that's the
22 first location of a purlin, and then it's fastened at the
23 edge of the building, that particular span would cause a
24 great deal of flex. That 8-foot -- 8- or 10-foot span
25 would cause a great deal of flex in that material, which

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1 would lead to this type of distortion in a wind event.

2 Q. Well, if it's a 40-foot panel, how does that
3 change your analysis?

4 A. Well, there's got to be some -- you -- you
5 wouldn't -- you couldn't design the building with a
6 40-foot span of -- of purlins. Typically the purlin
7 spacing is 4 feet, 6 feet, 8 feet. I've 10 and 12 feet.
8 But then you've got cable -- cable design construction on
9 the girts and on the framing members. I can't recall if
10 that is the case in here.

11 Q. Well -- all right. So, I mean, you know, there's
12 purlin in this building, right? I mean, that's what --
13 that's what's right underneath the roof panels, right, are
14 the purlins?

15 A. Well, you can certainly look in the interior
16 photo and figure that out real quickly. I just don't
17 recall.

18 Q. All right. And then right here --

19 A. I've looked at a few thousand buildings since
20 this -- this site visit, so.

21 Q. The screws that we're seeing going across the
22 panels, I'm guessing that's where the end laps are?

23 A. Yes.

24 Q. And we talked that about that earlier. And these
25 screws are screwed down into the purlins. And it's

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1 that -- those forces of the wind working against the
2 panels is where they're screwed into the purlins that
3 contributes to the oil canning that we're seeing? Is this
4 oil canning?

5 A. I think it's -- I think those are loose panels
6 with wind damage.

7 Q. All right. So, the -- I'm talking about --

8 A. Counselor, let me -- let me -- let me explain it
9 this way. I did not see this phenomenon when I was there.
10 I have been on roofs that present like this where it's a
11 windy day, 40-mile-an-hour wind. And I have taken videos
12 of the panels rippling in the wind in all of these types
13 of locations. I believe that's what is occurring now on
14 this building. That's different than oil can.

15 Q. So, how can you tell the difference between
16 some -- a panel rippling and oil canning? Is there --

17 A. Look at the extent. Look at the extent of the --
18 the -- the lines. They're so pronounced.

19 Q. And you don't think that's a -- some- --
20 something to do with the camera, you know, how we've been
21 talking about having some camera affects, kind of mess
22 this up a little bit? You think some of that is camera
23 related?

24 A. No, that's what my visual eyes saw when I was
25 there.

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1 Q. Okay. All right. So, this is not oil canning.
2 So, that picture we saw earlier on page 2073, that is oil
3 canning. And -- but this picture here on page 2077, the
4 lower picture, that's not oil canning?

5 A. Counselor, there's oil canning and there's wind
6 damage on each panel. It's both.

7 Q. So, it's both. Okay.

8 A. Yeah.

9 Q. And can you distinguish between the oil
10 canning -- and, again, you say, yeah, the horizontal lines
11 are oil canning and where the panels look like they --
12 they turn a little bit to the right or left, that's wind
13 damage, or is it all the same?

14 A. Right where you have your cursor, right now, the
15 little hand --

16 Q. Yes, sir.

17 A. -- that is wind damage. Go right up -- go just a
18 little bit above that. Go to the right. Straight over to
19 the right, that's oil canning.

20 Q. Okay.

21 A. All right. Go to the next big line, wind damage.
22 Go right a little bit more, up. Go up.

23 Q. Up?

24 A. To the end -- to right there, oil canning.

25 Q. Okay.

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1 A. Okay.

2 Q. All right.

3 A. Within the same panels we have both phenomenon.

4 Q. Great. That's what I was trying to find out.

5 Thank you. So, the heavy dark lines kind of toward the
6 sides are oil canning?

7 A. Yes. They also could be some wind damage.

8 Q. Okay. And I think we kind of get into another
9 photo just like that. Actually I think we've looked at
10 that one. Let's look at the photo on the top of page
11 2078. Same thing, oil canning and wind damage?

12 A. Yeah, but this is even more important. If you
13 can -- now, that we're on this photo. If you can move
14 your cursor over to the -- my left.

15 Q. Okay.

16 A. And then straight -- and then straight down. You
17 see those -- no, the other direction.

18 Q. Straight down this way?

19 A. Stop right there. Do you see those round areas
20 there? Okay.

21 Q. Yes, sir.

22 A. This is the beauty of having wind -- having rain
23 hitting a roof that's been damaged like this by wind.
24 That right there, those are additional distortions that
25 are not consistent with oil canning. You also have them

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1 in the next panel over on the left, right up above. And
2 they're coincidental to where the panels have shifted.

3 Q. I'm sorry. You said that we had this -- over
4 here?

5 A. Yeah.

6 Q. The top left? Okay.

7 A. Yeah.

8 Q. Okay. And is that wind damage --

9 A. Yes.

10 Q. -- not oil canning? Okay. And did that also
11 occur during the May, 2017, storm?

12 A. Would be consistent with the increase in leaking
13 in this roof, yes.

14 Q. And none of these are installation related
15 issues --

16 A. No.

17 Q. -- in your opinion?

18 A. I could not install the roof and make it do that.

19 Q. The bottom picture on page 2078, it's a caption
20 panel distortion and bent fastener. What are -- what's
21 what here?

22 A. Well, the panel is -- is shifted from its
23 original position right below the one. At the one and one
24 eighth is an actual storm-created opening.

25 Q. This right here?

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1 A. From the panel shift. See the dark -- yeah,
2 right above that there's a hole.

3 Q. Okay.

4 A. That's a -- that's a storm-created opening from
5 the panel shift.

6 Q. Okay.

7 A. The fastener is bent.

8 Q. Okay. So, this is not an angle-driven fastener;
9 this is a bent fastener?

10 A. Yes, in my opinion that is a fastener.

11 Q. And then this -- did the -- did the, I guess, the
12 panel pull toward the end of the -- you know, the -- the
13 left side or did it pull toward the two? Do we know?

14 A. Pulled -- pulled towards the -- towards the left
15 side.

16 Q. Okay. All right. And that happened in May of
17 2017?

18 A. I believe it did, yes.

19 Q. And is that caused by the uplift that you were
20 talking about earlier when we were describing how the
21 winds acts on the --

22 A. The -- the -- the term we use -- and we try and
23 dumb this down for juries is -- that I like to use is
24 react and recovery. So, the -- the panel will react to
25 the wind and will move and it will attempt to recover to

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1 its original position. That didn't occur here. So, yes,
2 the wind induced forces caused that panel to -- to lift
3 and move at the same time. And it did not recover.

4 Q. Did it --

5 A. It's a line right above the -- so, if you go up
6 the 1-inch mark --

7 Q. Yes.

8 A. -- go up 1 and three-eighths and look straight
9 above, you know, you can see. And that -- that's --
10 that's flesh pan- -- exposed panel.

11 Q. Okay. And then there's a hole that's kind of
12 like -- I don't know, it's like kind of under 1 and an
13 eighth, between 1 and an eighth and 1 and a quarter?

14 A. Yes.

15 Q. That --

16 A. And that is right in a location on the top where
17 the panels come together that is typically a drain trough
18 where water hitting the top of the panel will run along.
19 So, water upward of this, running along that little
20 channel won't bridge that gap but will run in through that
21 opening.

22 Q. All right. Let's look at a few more photos and
23 then take a short break. Okay. This is the photo on the
24 top of page 19 of 35, which Brabo 2079. What are we
25 looking at here?

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1 A. Yeah. Remember I talked to you about the fact
2 that the -- there were parts of this roof where the clips
3 had actually come loose, where the -- where the panel was
4 actually lifted up. This is an example of that. So, I
5 have -- I have stress on these two fasteners. This is not
6 stress from the fastener being overdriven. This is
7 circular, large oil canning that's occurred around these
8 because the panel attempted to pull through at these
9 areas.

10 I then have a crease on the right-side panel
11 on the 45-degree angle that extends down to the roof, up
12 the angle and up to the bend. And then I have the -- the
13 actual crimp at the top that's pulled out. This whole
14 area if you put your hand on it, you can push it up and
15 down. So, that -- that is typical, classic wind damage
16 and uplift at a -- this type of a panel.

17 Q. All right. So, you're saying that the seam -- if
18 we were to do like a bird's-eye view of the seam, at this
19 location, we would see it's spreading out like it's
20 pulling apart.

21 A. Yes.

22 Q. Okay. Because I -- this looks a little bit like
23 some kind of in-camera distortion. Let me show you some
24 photos that you took -- or I'm sorry, you didn't take.
25 Your company took. My bad. And kind of back off on that

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1 a little bit. Let me show you. All right. This is your
2 company's photo 6529. Pretty sure we're looking at the
3 same area because there's some paint spots, right? And
4 see how it's kind of zoomed back. It's more of a wide
5 shot. I don't see quite the distortion that I'm seeing in
6 your photo on page 2079.

7 A. Well, this -- it's not camera distortion. And
8 interestingly enough, what I'm seeing here is -- so, most
9 of -- one of our highest wind pressure zones -- and
10 Johnson can speak to this -- is the roof edge. So, what
11 I'm seeing right here is I'm seeing at the -- all the way
12 along this roof edge, I'm seeing a bend in the panel at
13 the first row of fasteners away from the edge. So, this
14 to me looks like the edge of a roof that tried to lift
15 itself off of its connection. It didn't happen, but the
16 resulting damage is clearly evident.

17 Q. Why are you saying that you have more -- you're
18 saying you have more wind damage or potential for wind
19 damage at the edge of the roof?

20 A. Well, yeah, it's one of the -- it's one of the
21 wind boundaries. So, the edge of the roof and inward of
22 that edge, a foot or 2, is going to be a high wind zone.
23 And so, that's one of the first places we look for wind
24 damage. That's what this photo is trying to show.

25 Q. So, this --

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1 A. I don't know why it didn't make it necessarily
2 into my final report, but that's a great photo. It should
3 have been put in there as one of the exemplars.

4 Q. So, you're saying that the wind forces are
5 greater -- on the panels at least are greater at the edge
6 of the roof rather than say at the middle of the roof?

7 A. Yes.

8 Q. In the middle of the panel?

9 A. Absolutely. Yes.

10 Q. In the middle -- okay. In the middle of the
11 panel? Okay. All right. And then -- so -- but -- okay.
12 I appreciate that. Let's go back to the scene. Don't see
13 that -- the same kind of distortion in this shot that I've
14 seen from the earlier photo, the one that made it into
15 your report. Do you know why that is?

16 A. Is this the same photo?

17 Q. Well, I mean, I'll show you the -- the sequence
18 leading up to it. I think that was it right there. All
19 right. Is that -- this is photo 6531.

20 A. Okay.

21 Q. It looks the same photo as on your -- the top of
22 Page 2079. You got the two paint spots here. So, the
23 spread seems -- I don't know. I'm just asking if you
24 think the camera could be exaggerating the spread --

25 A. No.

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1 Q. -- like a defect or something inside the camera?

2 A. No, as I indicated to you before, you -- this
3 is -- the work we do is closeup work. You're -- the
4 engineer for the insurance company indicated that there
5 was no wind damage because he didn't see panels that had
6 blown off, panels that had bent back or folded back.
7 That's easy wind damage to see. The wind damage we're
8 talking about is much more subtle. It takes closeup work
9 and closeup analysis.

10 Q. Let's go back to your report. All right. Can
11 you see your report again?

12 A. Yeah.

13 Q. All right. So, then, bottom of page 19 of 35,
14 Brabo 2079, got a panel with some arrows.

15 A. Yes.

16 Q. Caption: Hail damage and panel uplift. Which is
17 it here?

18 A. Yeah. The upper arrow is the uplift. What you
19 see on these panels is when they are -- when they are
20 seated, S-E-A-T-E-D, into clip system, there is a very
21 clear edge at the -- at the location where I have that
22 arrow. All right?

23 Q. The top arrow?

24 A. Yeah. When it is lifted off of the clip, you get
25 a swell where it kind of starts to round up. It's one of

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1 the signature patterns that you look for. That's what I'm
2 trying to show you here.

3 Q. And -- and is the swell --

4 A. Because look right above it. If you look right
5 above it, it's a nice clean angle on that other panel.

6 Q. Okay.

7 A. Right?

8 Q. On the right side?

9 A. Yeah.

10 Q. Where got -- right where the screws are?

11 A. No, no, no. Go up. Go to the right. Yeah.
12 Right there. It's a nice, clean 45-degree angle.

13 Q. Oh, going up the seam. Going up the seam?

14 A. Yeah.

15 Q. Okay?

16 A. Below it's not. It swoops up. So, that's an
17 indication of a clip that has come -- come loose.

18 Q. All right. So, you're saying that the panel --
19 there's a clip here right by where the screws are, and
20 that it's pulled out. And so, we don't have a nice
21 45-degree angle there?

22 A. Right. The panel is lifting up.

23 Q. Okay. All right. And then the other three
24 arrows are -- are hail indentations?

25 A. Yes.

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1 Q. And all this occurred, you believe, in May of
2 2017?

3 A. Yes.

4 MR. ANDIS: We are probably at a pretty good
5 stopping point for another short break, if that's okay.

6 THE WITNESS: Sounds great.

7 THE REPORTER: Okay. Off the record at 2:46
8 p.m.

9 (Recess taken)

10 THE REPORTER: Okay. We're on the record at
11 2:58 p.m.

12 Q. (By Mr. Andis) Mr. Irmiter, we're looking back
13 now at your report, section 3.2, infrared scanning of
14 roof. I believe you said earlier you are IR trained. Not
15 sure if you're IR certified?

16 A. Correct.

17 Q. And, then, I believe the -- were these photos
18 taken by -- who has the initials G and D?

19 A. Gavin. Gavin Davis.

20 Q. Okay. And is he -- is he the one that left your
21 company or is he still with you?

22 A. He's still with us.

23 Q. And did you say that he was IR certified?

24 A. Yes.

25 Q. Okay. Yeah, you said he does Xactimate work and

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1 he's IR certified and he's from Puerto Rico?

2 A. Yes.

3 Q. All right. The photos that we have here in your
4 report -- actually I think there's some even in JEF.
5 These -- these are infrared. So, they're actually showing
6 a contrast between an area temperature wise in these
7 areas, right?

8 A. Yes.

9 Q. So, at the top right and at the bottom right of
10 two photos, there's paint and then there's a darker, I
11 guess, blue, the top photo, and there's yellow and orange
12 and then a darker blue. And I guess there's a scale, a
13 temperature scale?

14 A. Correct.

15 Q. All right. So, this doesn't necessary -- I mean,
16 it could indicate water, but it really is -- for our
17 purposes for sure, it's just indicating a difference in
18 temperature?

19 A. I disagree with that.

20 Q. Okay. So, you believe there's water in these
21 areas?

22 A. I will stipulate that the photo number -- I can't
23 move this, but the bottom, the yellow one, that -- that --
24 that's -- that large stripe of purple that's coming down,
25 as I indicated we had the benefit of it raining that day.

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1 This is actual water coming through the roof at that
2 location.

3 Q. And that's --

4 A. Infrared camera -- infrared camera is catching
5 it.

6 Q. And that's a pipe penetration, right, from the
7 roof?

8 A. That would be a -- yes, absolutely.

9 Q. All right. So, even though -- I mean, we can
10 agree that it captures differences in temperature, you're
11 of the opinion this is -- this is water accumulating at
12 these dark areas?

13 A. Yes, absolutely.

14 Q. And I think on the next page, we have -- oh,
15 sorry -- two photos on the top of page 2081. I'm
16 presuming that these are the photos of the same area, one
17 with the -- is it a separate camera, the IR camera?

18 A. No, this camera takes a side-by-side picture.

19 Q. Okay. And so -- and the picture without the IR,
20 we see that's at a skylight area, right?

21 A. Yes.

22 Q. And then the IR camera is showing water coming
23 in, I guess, what, downslope of the skylight?

24 A. Well, that's where it's entering the build- --
25 that's where it's entering the building. We don't know

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1 what the -- that's where it's exiting into the interior.

2 We don't know where the entry point is.

3 Q. All right. You don't know the source. Okay.

4 The next --

5 A. Well, that's not true, counselor. We -- we -- we
6 know it's not a plumbing leak. Okay? We know it's not
7 groundwater. It's coming from the sky. So, we know the
8 source.

9 Q. All right. So, we don't know the actual location
10 of where it's coming in and the mechanism that's allowing
11 it to come into the -- to the building, right?

12 A. Correct.

13 Q. Okay. Photo -- exterior photos of the front
14 elevations, there's no real substantive comments there,
15 right, in those captions?

16 A. Correct.

17 Q. Just application shot. I think that continues on
18 until we get to the bottom of the photos on page 2082.
19 You're call -- you're calling this cohesion failure on the
20 wall and separation of wall?

21 A. Yes.

22 Q. All right. And what's going on on the left photo
23 that you say "cohesion photo failure" on the wall?

24 A. So, these are -- this building is tilt-up
25 concrete panels. And the concrete panels where they join

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1 together, there is a -- expansion joint that is put in
2 place. And that expansion joint is typically filled or
3 covered with expandable caulk or sealant. The -- we look
4 for two types of failure on that type of a mechanism: One
5 is adhesion failure, and one is cohesion failure.

6 Adhesion failure occurs when one side of the material
7 clearly, cleanly pulls away from what it's adhering to.
8 That might be, for example, at a window you have the caulk
9 on the metal of the window and then you have it on the
10 building material, the stucco, the brick, the stone or
11 whatever. And you have a nice clean line where you can
12 see where it did not bond and it pulled away. That is
13 typically related to an installation issue, installation
14 failure or aging and deterioration of the sealant.

15 Cohesion failure is a fracture or a tearing
16 of that caulk in section. So, both sides adhere and it
17 rips in between, which is typically consistent, not with
18 subtle movement but with very, very quick movement. We
19 see this in earth quacks, we see this in hurricanes, we
20 see this in tornadoes and in wind events. And typically
21 it manifests itself from the top down and not from the
22 bottom up.

23 In the particular building I believe
24 Mr. Spiekerman has this wrong in his report. He indicates
25 that this is the result of subsidence and soil movement

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1 and building movement related to the foundation. There
2 are no photos indicating that there are problems with this
3 foundation. If that were the case, then this should
4 continue from -- start at the bottom and work its way up
5 to top. And it starts at the top and stops about halfway
6 down the building. So, this would be indicative of a
7 pretty good wind strike, hitting this corner of the
8 building, which is also a high-wind zone.

9 Q. So, you're saying this line, this crack line, if
10 you will, it's in the -- it's -- this was like a sealant
11 or some kind of soft material originally when it was
12 applied?

13 A. Well, it still is even though -- yeah, it still
14 is even when we were out there. When I saw that, we
15 checked that. I checked that. So, that's still had --
16 that still had flex in it.

17 Q. All right. And --

18 A. It was not dried out and nonflexible.

19 Q. Right. But that's a -- that's also maintenance
20 item, right, where you have to go in every so often and
21 reapply that stuff?

22 A. You know -- well, yeah, but that's not a
23 maintenance issue right here.

24 Q. Okay.

25 A. Yeah, that -- that -- that's -- that's the

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1 building flexing beyond the tolerance for that material.
2 That typically is a result of a very quick movement of the
3 building.

4 Q. And -- and you're saying that if it is wind
5 related, that the cracking, if you will, will start at the
6 top and go down to a certain point and then probably stop?

7 A. As indicative of the photo on the right, yes.

8 Q. Okay. Well, these are two different areas,
9 right, two different photos of two different areas?

10 A. I believe so, yes.

11 Q. Okay. Because here you got a vent. This is a
12 side and this is a corner piece on the right?

13 A. Yes.

14 Q. Okay. Do you know what side this wall with the
15 vent, what side of the building this is on?

16 A. I'd have to go back and look. Just a second. I
17 believe it's the right elevation.

18 Q. Toward the front, toward the back?

19 A. I believe it is towards the back.

20 Q. Are you saying this crack that we see goes all
21 the way up to the actual top of the wall and where the
22 roof is?

23 A. I can't tell from this photo.

24 Q. Yeah. Do you have a photo that shows that?

25 A. I don't know if we do.

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1 Q. Okay. All right. So, if it doesn't go up to the
2 top of the wall, what does that mean?

3 A. That -- this -- in this location it could be
4 related to foundational movement.

5 Q. Okay.

6 A. Okay.

7 Q. All right. All right. Now, let's talk about
8 that photo on the right. Do you know where this is at on
9 the Auburn property where it says --

10 A. I can't -- I think it's on the front right or
11 front left corner.

12 Q. Okay. All right. And do you know how long
13 that's been like that, at Auburn?

14 A. Well, there's no paint inside of it. We didn't
15 get up and examine it closely. I noticed it when I was
16 there. It looked like a fresh crack. It didn't look like
17 it was, you know, old. We -- we related it possibly to
18 the wind.

19 Q. Okay. And I have some -- I have some of your
20 photos I wanted to show you. Give me a second. I'm
21 sorry, Mr. Irmiter. I had some -- I want to -- you guys
22 took some other photos that I thought might help us out
23 here. All right. So, you're not -- well, I want to look
24 at those. You're not saying that that's wind from 2017,
25 or are you? I'm sorry.

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1 A. I -- you know what, I just -- I'd have to take a
2 peak real quick to see if I even bothered to include this
3 in my estimate.

4 Q. Okay.

5 A. I don't recall if I did. Yes, I've got a small
6 repair at that location.

7 Q. Okay. So, you think it's -- was caused by the
8 2017 event?

9 A. Yes, the one on the right.

10 Q. Okay. Actually I have that photo. Maybe -- it's
11 hard to see in the PDF. But I'm going to bring up the
12 JPEG that you produced or try to. There we go. This is
13 Photo 5134 from your files. That's the -- that's the same
14 thing, right?

15 A. Yep.

16 Q. Okay. I zoom in over here on the right a little
17 bit. Can you see what looks like patches or patching
18 material and maybe even some touchup paint on the right
19 side of that?

20 A. Yes, it does. Not on the left hand, though.

21 Q. Right. Right.

22 A. No.

23 Q. Does that give you any thought as to whether or
24 not this actually occurred during the May storm and may
25 have occurred prior to that?

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1 A. The one on the right does not appear that it did,
2 but the one on the left certainly does.

3 Q. Okay. So, it's possible, then, that the
4 left-side cracking happened in May; and the right-side
5 cracking happened before May of '17?

6 A. Yes.

7 Q. Okay. I mean, you're not going to change your --
8 are you gonna change your estimate based on -- on this
9 photo?

10 A. No, I still need to repair that area on the -- on
11 the left.

12 Q. Going back to your report, next page we've got --
13 looks like more of the same cohesion failure on the wall.
14 Do you know if this is the same location that we were just
15 looking at, not the corner piece, but the same location
16 there at the back, I think back right or is this the --

17 A. No, these are different locations. I think there
18 were four areas where we saw the cohesion failure. Some
19 to a larger degree. But I can't tell you specifically
20 where these two are.

21 Q. All right. But you think these go all the way up
22 to the top and that's why you -- I guess you included in
23 the storm damage from '17?

24 A. No. The storm damage is that corner that I'm
25 repairing.

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1 Q. Right, right. But on the -- earlier, the
2 photo -- well, just right before then where there was
3 cohesion failure on the wall that you said was at the
4 right side toward the back --

5 A. That's right.

6 Q. -- the cracking between the tilt-wall panels --

7 A. Right.

8 Q. -- I thought you said that if the -- the evidence
9 of it being wind related was that it starts at the top and
10 comes down and then stops before it gets to the bottom?

11 A. Yeah. Correct, yeah. And I -- so, what I'm
12 showing you is a example of cohesion failure here. We
13 could have been a little more definitive to say this is
14 cohesion failure in this particular photo that we do not
15 believe was related to the storm, that -- what -- so,
16 therefore, it is not in our estimate.

17 Q. Okay.

18 A. The numbers that I have included for repair are
19 for the cornier that was damaged.

20 Q. Okay. So, you're not including any -- you don't
21 believe any of the tilt-wall panels where the stuff comes
22 -- whatever that stuff is called, that -- where -- that's
23 plopped in there in between the -- the panels, you don't
24 believe any of that's tilt-wall damage from wind?

25 A. No, just the one corner.

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1 Q. Okay. So, just the corner piece. All right.
2 So, this is not damage that you're claiming was caused in
3 2017 here on the top of page 2083?

4 A. No.

5 Q. Okay. What about on the -- all the window photos
6 that we have? Is that damage from '17 or is that just
7 examples of cohesion failure?

8 A. No. I believe all of the windows need to be
9 replaced.

10 Q. Okay. And when do you think that occurred?

11 A. I believe that these were damaged -- well, I
12 thought -- I mean, that's a -- those are fresh-air
13 openings right there that I'm showing -- that we're
14 showing here. These windows moved in their opening. And
15 that -- these windows aren't really designed to do that.
16 So, they are independent of the structure; but they are
17 installed into the structure. So, when they go under
18 tension from high wind, they become a structural element.
19 They're not designed to do that, and they break. And
20 this -- these are signs that that has occurred.

21 Q. Now, what else would be evidence besides cracking
22 in the caulk at the -- where the window meets the -- the
23 tilt wall, the window framing meets the tilt wall, what
24 else besides just wear and tear and aging would you expect
25 to see if there were wind damage and some type of twisting

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1 or separation of the framing unit from the --

2 A. Well, so, this window -- this window has a weep
3 system. So, then, if water gets into the -- the metal
4 assembly, it weeps out in the bottom. When we have
5 failure at what is called the intersecting butt joints of
6 the two frames, the right frame or left frame and the
7 bottom frame and water -- water then enters the assembly
8 and it exits at the butt joint location causing the
9 staining, discoloration that you're seeing.

10 Q. Is this window, I guess, separation or cohesion
11 failure, is that related to that corner piece where you
12 said that the one side of the building was separated due
13 to wind? Is that kind of like flowing down from that? Is
14 that related?

15 A. No. No. This is independent of those.

16 Q. Separate issue. All right.

17 A. I believe so, yeah.

18 Q. And then we've got -- I guess your -- the bottom
19 picture on page 2083 is -- this is where the tilt wall
20 meets the build out for the interior, right?

21 A. Yes.

22 Q. Okay. And so, the cracking is actually between
23 the tilt wall and, what is that, plaster or drywall?

24 A. It's a -- it's called -- it's called a cold
25 joint.

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1 Q. Okay.

2 A. So, it's an area where you would expect if there
3 is some movement, that a crack would -- would present
4 itself. We're not addressing that crack in our scope of
5 repair.

6 Q. All right. Are you saying that this crack
7 occurred in May of '17?

8 A. We're not -- yeah, we're not addressing this
9 crack in our scope of repair. That's what I'm saying.

10 Q. Okay. So --

11 A. So, you can move on.

12 Q. I don't want to move on. I just need an answer
13 to my question. Do you believe that this crack happened
14 during the May 21, 2017, event?

15 A. We could not determine when this crack occurred.
16 So, we are not addressing it in our scope of repair.

17 Q. Okay. All right.

18 A. Thank you.

19 Q. And -- but the window -- well, just make sure I'm
20 on the same page, the window --

21 A. Yeah.

22 Q. -- cohesion failure, you are saying occurred
23 during the May 21, 2017, event?

24 A. Absolutely.

25 Q. And -- oops, sorry, wrong way. And the crack on

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1 the one half of the corner there that's depicted in
2 photo -- that's on the bottom right of page 2082, that
3 also happened during May 21, 2017?

4 A. Yes, we believe so.

5 Q. All right. Interior observations, again,
6 overview, I've got water damage to ceiling tile. Did you
7 say whether or not anybody attempted to trace -- and I
8 don't mean rainwater -- I just mean trace the flow of
9 water, how it's coming in, where it's coming in that's
10 ending up, resulting in this stain that we see here at the
11 top-right photo on page 2084?

12 A. No, neither party has in this case that I'm aware
13 of other than the -- the leak report that was done by the
14 public adjuster. Neither party has attempted to do
15 tracing or seal damn or damn testing or water flooding of
16 the roof ot recreate what is occurring and what my guys
17 saw the day that they were there when this roof was
18 leaking.

19 Q. Okay. Do you know if there is more locations
20 where there is ceiling tile and they only put one picture
21 in or is this the only place where the water was coming in
22 that was staining the ceiling tile?

23 A. As I indicated to you, we were told that there
24 are number of locations where ceiling tile have been
25 replaced and are continuing to be replaced. This is

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1 the -- you can see it a little better in the -- in the --
2 in the next photo down on the left, my left. This is a
3 atrium area above the office, and they have storage up in
4 that location. So, that ceiling tile that you see is the
5 office. Directly above that, is a plywood deck. They
6 store cardboard up there, and there are, I think, 57 or 60
7 photos taken by ownership of water coming in the days and
8 the weeks after, throughout the building including this
9 location up here. And it's my understanding that that was
10 not the case prior to this loss.

11 Q. All right. And did -- but you don't have anybody
12 that -- a tenant, representative or person that you have
13 spoken with or that your team spoke with that we know
14 their names that told you this information that then you
15 can then rely on it and we can verify it or cross-examine
16 it, right? We don't know who it is?

17 A. I can't recall at this point, no, the name.

18 Q. And if -- and if the guys happen to write down a
19 name, it would be in the field notes?

20 A. Correct. But we do -- but understand at the time
21 of our inspection, we had PAs leak report and we had the
22 photos taken by the owner's representative/tenants,
23 building manager, whoever took those photos of what
24 occurred the year before we were there. By the time we
25 get there, they've already been up there attempting to

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1 chase those leaks and putting in temporary patches.

2 Q. The photos that you were referring to, are these
3 photos that you think were taken during or immediately
4 after the May 21st, 2017, storm?

5 A. That's my understanding is that they were taken a
6 week or two after.

7 Q. And --

8 A. I think there was even a video.

9 Q. Okay. And not months later?

10 A. Maybe they were months later. But --

11 Q. You -- you don't know. All right.

12 A. They weren't taken before the storm event.

13 Q. This top left photo, does that look like it's
14 been painted over, that -- that insulation? You think
15 someone tried to paint over maybe a stain?

16 A. Can't tell from here. But no.

17 Q. Okay. All right. Then we just have some -- I
18 guess this is all insulation that gave it up after
19 collecting enough water?

20 A. Yes.

21 Q. Okay. What's going on down here at the bottom of
22 the -- in these photos on page 2085, the bottom two
23 photos?

24 A. There's a bracing clip that holds the tilt-up
25 panels together. And this is showing the interior side of

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1 one of the exterior panels where we had taken photos of
2 the cohesion failure. And this shows that the actual
3 panel has displaced causing these to separate. That is a
4 concern that needs to be addressed. We did not include
5 the removal and resetting of this panel or some type of a
6 in-field structural, localized repair in our estimate
7 because we could not determine if this particular area was
8 wind or not.

9 Q. So, you're not saying that this happened during
10 the May 21st, 2017, event?

11 A. We did not include it in our pricing because we
12 could not determine. We certainly know it's not caused by
13 hail.

14 Q. Okay. All right. And I'm with you on that. I
15 just need to be clear: You didn't -- you didn't estimate
16 it because you can't determine whether or not it happened
17 during the May 21st, 2017, event?

18 A. Correct.

19 Q. Thank you. Did you notice indications that
20 the -- the Auburn building is crooked? It was actually
21 constructed crooked when you were out there?

22 A. No. We did not take any horizontal or vertical
23 measurements of the building for those purposes.

24 Q. Okay. Try to do something here. You know, I'll
25 have -- just have to deal with it later. All right. So,

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1 then, we go to the window damage. You have another
2 section in your report on window damage. These -- is this
3 a different -- these are different windows?

4 A. No, it's the same windows. I don't know -- I
5 can't remember why we didn't put it all together.

6 Q. Okay. Actually I have a section here on window
7 damage. There's some -- some discussion up here. This
8 paragraph it starts, "We observed displacement of
9 frame-to-frame butt joints at intersecting members."
10 What -- what do you mean by that, this -- the paragraph,
11 not necessarily that sentence? I just wanted to focus you
12 on it.

13 A. Well, I think it's pretty self-explained. These
14 windows are storm-front glazing. So, unlike the window in
15 your home, which is manufactured as a single component,
16 these are typically either built on the site or they're
17 built as individual components that are put together. So,
18 the weak point on this type of fenestration is at the
19 intersecting members or the butt joint. Those joints can
20 either be a 45-degree miter or a butt or a -- a vertical
21 line is created. And that's -- so, at this building,
22 those butt joints should be lined up. And one of the
23 things that we look for is butt joint displacement. In
24 other words, they are no longer in plain or in line with
25 each other.

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1 The second thing we look for is they're
2 assignment. The window moved quickly and broke the caulk
3 joint. And we saw both of these signs at this building.
4 In our -- in my opinion that indicates the windows are
5 damaged beyond repair and will need to be replaced.

6 This is often overlooked in investigations
7 that are conducted by other consultants that we see in the
8 industry. They focus on the roof, but they don't
9 recognize that this is also a component and/or cladding
10 that can suffer wind damage.

11 Q. But this stuff also dries out, this caulk, right,
12 also dries out and cracks over time?

13 A. Yeah, and alligators. But it doesn't present
14 itself that way. It's doesn't break that way. So...

15 Q. What is "that way"? I don't -- can you describe
16 it in such a way that --

17 A. Well --

18 Q. -- I know what you're talking about?

19 A. -- doesn't tear in section.

20 Q. Okay. So, would you consider like -- I'm kind of
21 put my cursor on the top part of the right photo, that
22 section and then below it is a little line and then there
23 is another section?

24 A. That's a tear-in section, meaning between the two
25 pieces.

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1 Q. So, that would be wind related as to just wear
2 and tear and aging?

3 A. Yes.

4 Q. Okay.

5 A. In fact, in Mr. Spiekerman's photos, he -- I
6 think he shows one or two window photos and he says there
7 is no hail damage to the frame. But in the photo, there
8 is butt-joint displacement that he fails to mention. I
9 don't know if he even knows that that's what he should be
10 looking for. He may not have training in fenestrations.

11 Q. And then the bottom photo, where it says "window
12 frame is displaced," is that the --

13 A. Yeah.

14 Q. -- same kind of thing or is that different?

15 A. Yes.

16 Q. All right. And can that -- does that just only
17 happen in one particular spot on the window frame or does
18 it manifest in didn't areas of the same window frame?

19 A. Well, that's a large window. So, it may manifest
20 in all of those intersecting locations. This is just one
21 example of it. So...

22 Q. Okay. Because I've got the photos from your
23 files from that particular window, at least I presume it
24 is. And I'll -- I'll show you what I think it is and put
25 the first one at the spot 109. Do you see that?

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1 A. Yes.

2 Q. All right. So, if I go to the next photo, which
3 is 5110, it appears to be the same photo in your report.

4 A. Yes, by blowing up to get closer to it.

5 Q. Sure. So, presumably -- I mean this is the same
6 window, right, that -- as yours?

7 A. Yes.

8 Q. Okay. So, you see signs of any kind of twisting
9 or separation anywhere else in this window frame?

10 A. I examined this entire photo doing closeups and,
11 yes, I saw it at the -- at the horizontal to vertical mull
12 in the middle of the window as well. So, yes, it -- it's
13 throughout the window.

14 Q. It's where the -- you're saying where the
15 vertical framing meets the horizontal framing at the --
16 right where it comes to the -- to the building itself?

17 A. Well, in the middle of the window, too, down
18 below. You follow that straight down the middle, that
19 same line.

20 Q. So, if we saw the framing, if this picture
21 continued on and we could see the -- the bottom of the
22 window frame, you could can see the --

23 A. No. In the middle of the window, there is a --
24 right there. That -- yes. That's a -- that's a
25 horizontal -- that's a historical mullion, if you will,

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1 that separating the upper and the lower laths. We got
2 twisting and separation of that mullion as well.

3 Q. All right. And show me where that is twisting.
4 I'll move my cursor. You just tell me where to move it.

5 A. This picture doesn't show it very well.

6 Q. Okay. How about that? How about that picture?
7 This is 5112. You see it there?

8 A. I don't see a different picture.

9 Q. Oh, that didn't go to a different picture?

10 A. Okay. There we go.

11 Q. Sorry, I switched it back.

12 A. Yeah, that's okay. That's okay.

13 Q. Yeah. Yeah. This is 5112 that I have up from
14 your files.

15 A. Yeah.

16 Q. Can you see the -- whatever it is you were just
17 describing there in the middle of the framing?

18 A. Not without blowing it up and looking at it
19 closely.

20 Q. Okay. So, even if we zoom in, that's not gonna
21 help you?

22 A. Well, you can zoom in and --

23 Q. Sure.

24 A. Not that -- so, that's a little too much. If you
25 could go -- go down, the overall picture.

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1 Q. Oh, zoom out and go down, like this?

2 A. Okay. Go to the right of that blue sign.

3 Q. Yes, sir.

4 A. Yeah, zoom in on that.

5 Q. This right here in the middle?

6 A. Yeah.

7 Q. Okay.

8 A. Yeah, that butt joint's twisted. The bottom's in
9 a line. That's -- that's typical of -- of damage. And
10 the other thing that's interesting on that is that -- so,
11 a lot of people, including perhaps BCS, will focus on
12 where the glass comes in on the top there. And that's --

13 Q. This area right here?

14 A. Yeah, that weather stripping. And they'll say
15 that that's a defective install because there's an opening
16 right there. All right.

17 Q. You talking about this little gap right here?

18 A. Yeah, that's what happens when that -- that
19 gasket dries out.

20 Q. Okay.

21 A. But when that dries out and if water gets in
22 there, it doesn't leak out of the area where it's leaking
23 out of. It runs down and leaks out at the bottom. That's
24 where the weep is. Otherwise you'd get leaking into the
25 building. So, the pattern that you see on the vertical

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1 intersecting member to the horizontal member, those white
2 lines, that's an indication --

3 Q. Like this?

4 A. -- that the seal -- that has been broken and so
5 now water, instead of going out of the weep is coming out
6 that direction. And when that occurs, we typically,
7 then -- the next event that occurs is water then begins to
8 leak into the building. So, that's an indication of a
9 damaged window.

10 Q. All right. And that occurred in May of 2017?

11 A. Yeah, based on the -- other than leaking, it
12 looks consistent with that.

13 Q. All right. I don't know what that is. Let me go
14 back to your report. Are you back on your report there,
15 Mr. Irmiter?

16 A. Yes.

17 Q. Okay. Now, we've got on this next page --
18 sorry -- you've got page Brabo 2087, the top left photo,
19 window glazing is damaged. Is it your position that this
20 occurred during the May 21, 2017, event?

21 A. Not necessarily.

22 Q. Okay. You did not include that in your estimate?

23 A. I'm replacing those windows for other reasons.
24 So, it didn't matter.

25 Q. All right. So, even if it wasn't damaged, you're

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1 calling for it to be replaced because of what we just
2 talked about?

3 A. Yeah, the frame damage. Yeah.

4 Q. And then you've got -- is this from the interior?
5 Are we now --

6 A. Yes.

7 Q. Okay. So, from the interior, is this just more
8 of the same, this window frame displacement on the --

9 A. It's more --

10 Q. -- interior side or is this different?

11 A. No, that's more obvious cohesion failure. So,
12 that is really very obvious and the one directly below it.
13 This is a window that within its rough opening moved from
14 its original location very, very quickly, causing that
15 fracture. And that is -- that's indicative. If all I --
16 so, in other words, if I came up to these windows and I
17 saw some -- a single corner where I had some butt joint
18 that was displaced or maybe out of alignment but I didn't
19 see any of these other signs, I would say, okay, this is
20 an installation issue at this corner of the window, which
21 can happen.

22 But the cumulative effect of this
23 investigation indicated that the windows moved as a result
24 of, I believe, overloading from wind; and, in addition, it
25 presented in two ways, this -- on this side of the window

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1 and on the exterior at the intersection of the frame and
2 at the frames themselves where the butt joints displaced.

3 Q. And then -- now, do you think there's any chance
4 that this happened when whatever happens in a break, this
5 window, or crack it, hit it with enough force to displace
6 the framing as well?

7 A. Typically not. I -- I can't recall ever seeing
8 like a baseball hitting a -- a glass or a bullet and
9 causing collateral frame damage.

10 Q. Okay. Well, I don't know if any baseball or
11 bullet hit this glass. I'm just saying is -- if something
12 large or wide hit it with enough force, could that
13 displace the framing as well?

14 A. I can't even than tell you if that's the same
15 window as these other three.

16 Q. Okay. All right. Now, on port -- part 6.0,
17 review of Stolk Lab reports, again, you're just picking up
18 and cutting and pasting from the Stolk reports. You're
19 not adding any sort of opinion or commentary to what Stolk
20 said?

21 A. No. Correct.

22 Q. All right. And you've not independently actually
23 looked at the Stolk samples to see what they were saying?
24 And I mean the -- the cuts as well as the amounts, you
25 haven't seen those?

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1 A. No, just the photos.

2 Q. Okay. Now, I'm getting close here on this one.
3 All right. Now, we've -- you've got Stolk quoted there.
4 And 7.0 is your causation statement. Have we pretty much
5 kind of gone into the various details of your causation
6 and opinions on -- on this property based on going through
7 the pictures and the narrative of the first part of your
8 report?

9 A. Yes, we have.

10 Q. Is there anything in the captions -- I'm sorry.
11 Anything in the photos that followed this section that
12 would show something new or different or would be
13 something we need to talk about or -- because there's no
14 captions? Are we kind of -- that's just more of what
15 we've been talking about that's in the -- in the rest of
16 your photos?

17 A. Well, yeah, I -- the causation report I think is
18 important in two -- two factors: It's ends up summarizing
19 essentially the opinions of Johnson and I have, based on
20 the inspection. It intimates that we did not create the
21 methodology for the inspection ourselves. We actually
22 followed the American Society of Testing and Measures
23 standards for conducting this inspection. And that led
24 us, based on following those standards, to the conclusions
25 that the storm of May 21st, 2017, caused damage both in

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1 the form of hail and the form of wind. And as a result of
2 that, the roof assemblies need to be replaced, the windows
3 need to be replaced and there are certain code issues that
4 will come into play.

5 Q. You mentioned a -- the investigation was
6 conducted in accordance with certain standards. Did you
7 say those are ASTM standards?

8 A. Yes, and they're mentioned in our documents up
9 above.

10 Q. Can you tell me which standards actually govern
11 the investigation like what you conducted here?

12 A. ASTM E2128 would be the general standard that we
13 would follow. And that is conducting investigation into
14 wall and ceiling assemblies for water damage. Within that
15 standard it covers methodology for taking photos,
16 documenting conditions, trying to get from building owners
17 a history of the building, a history of maintenance, a
18 history of leaking and then conducting your own onsite
19 investigation to determine what will the parts of the
20 standard we did not follow or complete. It also does
21 indicate that you can, given the right resources and the
22 time, conduct additional infield testing, for example,
23 ASTM and AAMA testing on window leaking. You can do water
24 penetration tests for walls and for roofs to try and trap
25 the path of leaks. We didn't do that at this point.

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1 MR. ANDIS: I'm sorry. Can we go off the
2 record real quick?

3 THE REPORTER: Off the record at 3:38 p.m.
4 (Recess taken)

5 THE REPORTER: Okay. Back on the record at
6 3:46 p.m.

7 Q. (By Mr. Andis) All right. Mr. Irmiter, I think
8 what I was trying to get at is if you saw something at --
9 during your visit or in the photographs, you would have
10 put that in this main body of your report and had some
11 discussion about it; and anything that's not in the report
12 that would be in the -- toward the back where the
13 uncaptioned photos are, those are just sort of additional
14 exemplars or evidence of what we've already talked about
15 and nothing new and unique that we haven't already
16 discussed?

17 A. No, other than what I've testified to.

18 Q. Okay. Yeah. I'm just saying that, yeah, well,
19 we didn't talk about this Photo you know, 172, and this is
20 really, you know, something completely different. So,
21 we -- we covered it even though we haven't covered your
22 photo, right?

23 A. Well, yeah, I'm not gonna -- I'm obviously not
24 gonna limit testimony on my own. I certainly will reserve
25 the right, if asked, to -- and would plan on looking at

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1 all of the raw photos that we've taken and presenting at
2 trial the best representation on the photos that I think
3 support our opinions. And if I'm asked for rebuttal
4 testimony, I would certainly reserve the right to present
5 any of BCS's photos in answer to those and along with my
6 photos. But yes, I will stipulate that we have not
7 reviewed all of those photos today, thank God.

8 Q. Well, right. But -- but we've covered the
9 majority of your -- I mean, your opinions, and if there is
10 an opinion we haven't covered, it's like, well, maybe this
11 panel, the third one from the right is separating or
12 whatever, but that's the same as the one we talked about
13 previously, just a different panel. Gonna be the same
14 mechanism, the same -- the same, right?

15 A. Yes.

16 Q. Okay. On this page you talk about -- and I think
17 I know the answer, but let me just ask you: Second part
18 of our inspection, document review includes analyzing the
19 maintenance and service history when available. And that
20 would be the document we looked at earlier. I think it's
21 going to be Exhibit 6 that had the interrogatory response
22 and then some IGA invoices. You remember that?

23 A. Yes.

24 Q. All right. Service history when available,
25 again, same document, would be your service history?

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1 A. Yes.

2 Q. All right. Various damage patterns and video of
3 pre or post storm events, what does that mean?

4 A. Well, we go up on a roof and we see -- we see,
5 you know, pookie, tar, the roofing cement that's put on a
6 flashing location and there is one layer on it. And it's
7 nice and black in color. That tells me that was put in in
8 a certain time frame. I go up to the same location, and I
9 see five layers all different colors, okay, with -- with
10 the underlying layer being really gray and white and
11 chapped and cracked, it tells me, okay, well, that was put
12 on some time ago. So, that's what I mean by that. We
13 look for all of those kinds of things.

14 I indicated before the building is old. We
15 know that buildings as they get older will have occasional
16 leaks. I wouldn't have been surprised if this building
17 had developed a leak here or there prior to this event.

18 Q. And we talked about earlier building blueprints,
19 you did not review any on these two properties, right?

20 A. That is correct.

21 Q. And you don't recall the names of any tenants
22 that are interviewed and to the extent that that is
23 captured, it's going to be in the field notes?

24 A. Correct.

25 Q. And your conclusion with every -- all the hail

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1 and wind and rain -- or -- or the rain didn't -- well, the
2 rain, I guess, you're thinking would say damage on the
3 interior stuff, right, not exterior?

4 A. Well, the -- the rain -- the damage on the
5 interior ensues from the wind damage.

6 Q. Okay. And it all occurred on May 21st, '17. And
7 the basis for the -- there's no hail penetrations. So,
8 there's no hail-created openings. All openings that were
9 storm related were done by wind, and that wind occurred on
10 May 21st of '17?

11 A. Yes.

12 Q. And then -- I know we talked about how you
13 distinguish between hail that happened, say, more than ten
14 yours ago. How do you distinguish between wind that may
15 have happened, you know, previously to your inspection,
16 different from the date of the loss?

17 A. Couple of different ways. Certainly, we know
18 that when a roof panel is bent back, for example, by wind
19 and then the owner or the maintenance staff go ahead and
20 pound it back into place, fold it back over, and we visit
21 that site, you know, five, six, seven, eight, nine, ten
22 years later, whatever, that bend that was placed into that
23 metal is going to really show a wear more than anything
24 else. It's a -- it's a very good indicator that that --
25 you know, that didn't happen with -- with a current storm

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1 event.

2 The degree of maintenance on the roof, the
3 degree of -- of patching and the extent of patching is
4 also a very good indicator this building did not present
5 itself as a building that had a systemic leaking problem
6 as a result of a poor installation. It seemed to be
7 functioning very, very well and the -- and the limited
8 amount of patching that we saw, we related to localized
9 leaking in very small quantities and that's consistent
10 with the leak logs that we looked at. So...

11 Q. The wind speed, you believe, at the property, the
12 90 miles an hour, estimated?

13 A. Well, that's where we pegged it. We think that
14 it's between 96 and 76, either side of the airport, less
15 than a mile away, roughly or about a mile away. We've
16 got -- we've got NOAA reports of a -- wind speeds in knots
17 that are converted to miles per hour between 76 and 96
18 miles a hour.

19 Q. All right. And you're -- you're discounting the
20 59-mile-an-hour measured wind? I think it's 51 knots on
21 the NOAA report.

22 A. Well, no, I'm not -- I'm not discounting that at
23 all. Even within the 70 -- the 94 to the 76, it doesn't
24 start at 96. It starts on lower and builds to that. So,
25 even within that parameter, you could easily have captured

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1 a 51 knot, a 40 knot, a 20 knot. It just -- it doesn't
2 all of a sudden appear. It -- it builds. There's
3 momentum. So, that -- that doesn't concern me at all.

4 Q. How long do you believe the wind either blew at
5 that rate or was it just a single gust, like a
6 three-second gust that you believe --

7 A. I don't -- yeah, I don't know. I know that
8 the -- the design of this building was not based on the
9 three-second gust. It was designed on the fastest mile,
10 which is -- was in the codes at the -- at that time.
11 Mr. Johnson can talk to you a little bit about that
12 because there are some calculations that have to be done
13 to put a fastest mile wind load into a current
14 three-second gust. All I will stipulate to was that in my
15 opinion the wind certainly exceeded the design load of
16 that building at the time.

17 Q. The -- you made a couple of comments or several
18 comments about being fortunate that you were there or you
19 team was there the date it was raining. Did they take any
20 videos or actually record any active leaks into the
21 building at the time of their inspection?

22 A. I believe there are -- no videos, but I believe
23 there are some photos where we take a picture of a water,
24 you know, collecting on a floor or something like that.

25 Q. And did anybody make an attempt to trace the leak

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1 back through the -- whatever, the ceiling or the ceiling
2 tile and identify where it was coming from?

3 A. I don't --

4 Q. Other than the rain. I got the rain.

5 A. Yeah, other than the rain, exactly. No, we've
6 already testified to that, we did not do tracing.

7 Q. Now, on 7.6, you talk about Stolk and galvanized
8 panels. Do you know if these are galvanized or Galvalume
9 panels at Auburn?

10 A. Well, it's a term of -- that's really just a, I
11 guess, an industry term. It -- I grew up -- I'm old
12 enough to grow up to recognize that this -- and that's
13 just my language more than maybe Stolk's. I look at this,
14 and I was always trained that this is a galvanized panel.
15 Okay? And it will have a coating on top of it.

16 Back in the day before Galvalume, they used
17 to put an oil coating on it. I remember handling it when
18 it had oil coatings on it to try to give us some
19 protection. When you -- if you painted it without using a
20 product called GALVAGRIP, which essentially removed that
21 oil coating so you could paint it -- the paint would peel
22 off. So, when I use the term galvanized, I'm talking
23 about these panels. That's just my term.

24 Q. Okay. So, you're --

25 A. I understand your -- a panel of Galvalume

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1 coating.

2 Q. Okay. Okay. So, you're not being -- you're not
3 being technical in that statement there?

4 A. No.

5 Q. Okay. In this paragraph you talk about loss of
6 life expectancy. In your opinion, how much live is left
7 on the -- on the roof panels with the hail that you
8 believe would be hail indentations?

9 A. That's gonna literally be specific to each
10 indentation. That's the problem. You have to analyze
11 each indentation and try and figure that out. I don't
12 know that anybody would be able to -- to peg that. All I
13 will tell you is is that this is typically recognized as a
14 50-year panel in the industry. That's what people talk
15 about. These roofs look all 50 years without being
16 damaged. And so, in this situation because of the stuff I
17 saw at -- at Stolk Labs, I would anticipate that these
18 will begin to fail and they're already, what, 20 or 30
19 years old at the time of this loss, 20 years old. So, do
20 they still have 30 years in them? I think in the field of
21 the roof, yeah, they have more than that. I've seen these
22 things go 70, 80 years. It's where -- it's where these --
23 these imperfections occur that the damage usually manifest
24 itself. But I can't -- I can't speculate on how long that
25 will be.

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1 Q. Do you have an opinion on how much life was lost
2 in the roof panels with hail indents? Kind of the
3 opposite?

4 A. No, I understand. I understand. No, that would
5 be speculation on my part.

6 Q. The conclusions section, you talk about 1-inch to
7 4-inch hail. But that's just hail in the vicinity. And
8 we talked about that earlier, the hail that fell south of
9 the property that was reported to be 4 inches; but you're
10 not saying 4-inch hail fell anywhere near this property,
11 are you?

12 A. There's no indication of that.

13 Q. Okay. Yeah. You mentioned gutters and
14 downspouts. Were they damaged by hail or wind or is that
15 just -- that has to be replaced? Do they have to be
16 replaced just because you're taking out the roof and
17 putting a new one in?

18 A. Well, the issues going to be that where the
19 gutters and downspouts are currently placed on the
20 building, we're gonna be raising the intersection of the
21 roof and those gutters and downspouts up approximately
22 3-and-a-half inches for the insulation. And so, those
23 gutters will have to be taken off and reset. And just
24 based on my experience when that happens on a commercial
25 job like this, they trash them. They're not gonna be able

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1 to be reused.

2 Q. All right. So, I'll get to that in a minute.
3 The 80 percent of the overall roof area being impacted by
4 hail, did you do any kind of measurements or -- or -- how
5 did you reach that 80 percent number? How did you
6 quantify that?

7 A. Just on my own visual inspection and looking at
8 the photos that my people took. We did not do test
9 squares or sample squares or any of those kinds of things.

10 Q. All right. And then, again, we requote the Stolk
11 report, section 8.2. Looks like the third time, I think,
12 right, you quoted it?

13 A. Yes.

14 Q. Is there a reason you're requoting it again?

15 A. I think we wanted to emphasize that we did not do
16 the metallurgic analysis on this and we were not going to
17 rely on Stolk's information for that opinion.

18 Q. All right. And then you -- you underlined
19 certain aspects of Stolk's conclusions. Those aren't in
20 the original Stolk report. What's the point of the
21 underline?

22 A. This would be -- these underlines are based on my
23 own personal experience of looking at this material under
24 microscopes and seeing it in the field. I thought that it
25 was important to emphasize those.

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1 Q. Okay. All right. Now, we're going back to
2 damage to the metal roof. And you pulled out a corrosion
3 quote. Is that from the Metal Contractors Association
4 Installation Manual.

5 A. Yes.

6 Q. Okay. Now, you've got a quote. And then you
7 say, for example, indentations made by hail slows water at
8 the indentation location allowing for pollutants to
9 collect. And just for the record, we're on Brabo 2091.
10 That, for example, is not in the MCA manual, is it?

11 A. No, I'm -- I'm basically giving an example of
12 what I have seen in the field in 40 years of inspecting
13 these types of -- of roofs.

14 Q. And your opinion is that when the MCA refers to
15 trapped water, they're -- you would think that that's
16 including water that is retained however much in a hail
17 indentation or any kind of indentation regardless of
18 cause, right? If water's retained, that's trapped water,
19 in your opinion?

20 A. Just a second. Yes. And what I'm really talking
21 about is the chemical action that -- that MCA is talking
22 about. Again that -- that Galvalume -- the reason the
23 industry went for the Galvalume product was to add life.
24 The only reason it's there, it adds life to the product.
25 That is the specific function of it. If that is damaged,

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1 whether that is a mechanical damage or impact from hail or
2 wind bends the panel back creating a major crease and it's
3 fold- -- it's like getting a piece of metal and folding it
4 back and forth. That will damage that Galvalume, exposing
5 it to that chemical reaction process. And that's what I
6 believe Stolk has identified.

7 Q. Do you understand all the ways that Galvalume
8 interacts with the substrate to protect the substrate
9 from -- well, to lengthen the life of the panel? Do you
10 understand all the mechanic -- or electrochemical and
11 other aspects of that end?

12 MR. LUNDQUIST: Let me just object as
13 overbroad.

14 A. No, I mean -- yeah, not -- not on any -- not on
15 any chemical analysis level. I understand the concept of
16 it. I mean, I -- we owned a painting company. I mean,
17 I -- you know, we -- I understand the implications of
18 paints and sealants and protective coverings and what
19 their purpose is. But, no, I can't give you the -- the
20 chemical analysis and breakdown on what's occurring.

21 Q. (By Mr. Andis) In your report you talk about --
22 you say "Indentations are less ductile and more prone to
23 puncture from future hail and normal weathering events."
24 What do you mean by that?

25 A. That's a Johnson comment. You can ask him.

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1 Q. All right. So, he knows at least one question
2 I'm going to ask him tomorrow?

3 A. Yeah, there you go. I have to leave him one.

4 Q. All right. And we --

5 MR. LUNDQUIST: Actually I think he's still
6 listening, David, but --

7 MR. ANDIS: Did he leave us?

8 Q. (By Mr. Andis) All right. So -- and we've talked
9 about what -- the examples of the crimping uplift, panel
10 distortion, seam separation, storm created openings that
11 you are referring to here in section 8.2 of your report?

12 A. Yes.

13 Q. There is a part of the code here that relates to
14 ice barrier membrane. Do you know what I'm talking about?

15 A. I do.

16 Q. That's -- that's not applicable here, right?
17 You're just kind of quoting the rest of it and that just
18 speaks --

19 A. That is correct, that's not applicable.

20 Q. And then the exception that you've got here under
21 9.2 of 1511.3.1.1 exceptions, does that apply to this
22 building, to these buildings?

23 A. It does with respect to the definition of the
24 roof assembly. So, when you -- in your training as a
25 building code official and in the 24 hours of education I

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1 have to take each year, which by the way is more you and
2 Mr. Lundquist, I believe, have to take and even the
3 engineers that are on this phone call, we -- they stress
4 the exceptions and they also stress the definitions. And
5 the definition of the roof assembly, includes that
6 insulating material that is wet.

7 And so, in that situation, we -- we believe
8 the proper -- proper way to fix this is to remove all that
9 metal and the insulation. The -- we did not look at the
10 option of installing another roof over the top at all, and
11 I don't know that that is an option.

12 Q. You have not ruled out -- well, you don't know
13 one way or the other whether roof over roof would be an
14 acceptable repair method?

15 A. You know, I will tell you I've seen it. So, I
16 have three or four properties in Dallas that I did two
17 years ago where coincidentally they were damaged by wind
18 and hail. And the owner didn't even know this when they
19 brought them five or six years before that. When we got
20 up on the roof, they were a metal roof over metal roof.
21 So, it was a standing seam over a standing seam; and it
22 was a mess, quite frankly.

23 Q. But the code doesn't prohibit it, right?

24 A. Well, I've only seen it once in 45 years; and
25 that was on those two buildings in Dallas, two or three

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1 buildings. So, it -- I don't know that the code would
2 prohibit it. But I think there would be some engineering
3 challenges under the current wind uplift requirements.
4 And Johnson may be able to speak more about that, but...

5 Q. On your estimate, you got -- obviously you got
6 the isoboard factored in, and I think that's added
7 somewhat to the cost. If it's face-coat is not
8 conditioned, then the -- in Auburn, then that would not be
9 a code requirement to upgrade that iso and that would
10 require a revisit to your estimate, right?

11 A. I will agree to that.

12 MR. ANDIS: All right. All right. Let's
13 take a break.

14 THE WITNESS: Great.

15 MR. LUNDQUIST: All right.

16 THE REPORTER: Off the record at 4:08.

17 (Recess taken)

18 THE REPORTER: Off the record at 4:16 p.m.

19 Q. (By Mr. Andis) I'm going to switch to the JEF
20 property and your report on that. And just -- let me put
21 it up here on the screen for you. You see it up there, up
22 there on the right screen?

23 A. Yes.

24 Q. Okay. Just to -- see if we can cross this part
25 off real quick. The first few pages up to -- I mean,

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1 obviously with the exceptions in case you -- you know, you
2 a different address and things like that. But other than
3 that, nothing substantively is different in the Auburn
4 report up to at least page 11 of 36 --

5 A. I'll agree to that.

6 Q. -- looking at the structure? Yes.

7 A. Agreed, yes.

8 Q. All right. And then structurally, looks to be
9 fairly similar language. You've got a large field going
10 to the north of the property. Is this what you're
11 referring to --

12 A. Yes.

13 Q. -- open land? Okay. And that's what puts it in
14 your category C wind exposure?

15 A. Yes.

16 Q. And, again, you don't have the design plans for
17 this -- this building?

18 A. Correct.

19 Q. And WebCAD says it was constructed in 2001 rather
20 than 2002. Do you know of any reason why WebCAD is wrong
21 and you're right?

22 A. Our -- 2002 might be certificate of occupancy.
23 That's all. Sorry.

24 Q. Then we get into the repairs discussion. And
25 that would have been the same document that we looked at

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1 earlier with Auburn, right? It wasn't a different set of
2 documents sent to you for repairs other than that one
3 punch, right?

4 A. Correct.

5 Q. And, again, we have -- now, again, because of the
6 rain -- getting over to the roof observations, I don't
7 believe I've seen any closeup photos of hail indents with
8 any type of sediment or cleaned hail indentions,
9 striations. We don't have any of that at least as of the
10 time of your report?

11 A. I don't believe so.

12 Q. Okay. You would have been out there about an
13 hour to an hour and a half to each property, and the team
14 would have spent -- did you say four to five hours just on
15 the roof or in the entirety of each building?

16 A. It would have probably been a cumulative of --
17 because we two -- two people typically. It would have
18 been I would say cumulative six -- we call it person
19 hours -- on site.

20 Q. So, that have been like two people three hours
21 each. That'd give you --

22 A. Yes.

23 Q. Okay. All right. So, those are manhours, if you
24 will, person hours?

25 A. Right.

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1 Q. Not linear hours per person. Okay. And, then,
2 again, the distinguishing criteria for determining when
3 you believe the hail fell, not the presence of spatter
4 associated with an indentation, because of the weather,
5 but the lack of rust in the hail indent, you didn't see
6 any?

7 A. Yes.

8 Q. Okay. Now, it talks here the two clean tests
9 were performed. I think that's different.

10 A. I see that. I was just gonna look that up
11 myself.

12 Q. Okay.

13 A. So, we're on JEF, right?

14 Q. Yes, sir.

15 A. Yes, we were actually able to on JEF, clean some
16 spots. I've got at least in my raw photos I'm looking
17 right now at some of those.

18 Q. All right. Did any of those actually make the --
19 the first part of your report where you have your
20 narrative and your discussions?

21 A. I'll have to look. They should have. But if
22 they didn't, they're in the raw photos. So, let me look
23 real quick. Yes, it is in the report. There is one
24 example on page 16 of 36.

25 Q. Typical debris, pollutants at an impact?

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1 A. Yes. So, what that is -- that is actually two
2 impacts that are next to each other. And the upper one is
3 not cleaned out; the lower one is.

4 Q. Okay. So, make sure that I'm -- I'm with you.
5 We're on Brabo 2483, the top photo on the right?

6 A. Yes.

7 Q. Okay. So, the photo on the -- top photo on the
8 right shows two hail impacts?

9 A. Yes.

10 Q. All right. Is my cursor anywhere close to one of
11 them?

12 A. Move your cursor down a little bit. Right there.
13 That's one of them. And then the -- the round spot up
14 above that is the other one.

15 Q. That right there?

16 A. Yep.

17 Q. Or higher than that?

18 A. No, that's it.

19 Q. All right. So, these are hail dents virtually
20 right next to each other?

21 A. Yes.

22 Q. And you're saying the bottom indentation has been
23 cleaned?

24 A. Yes.

25 Q. And the top one has not?

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1 A. Correct. We did that to represent what that
2 looks like.

3 Q. Did you look at those under a field microscope or
4 a magnifying glass of any size?

5 A. No.

6 Q. All right. So, this is just taken from the
7 camera that -- I guess the Cannon camera that is SRD? Is
8 that --

9 A. Yes. Scott -- Scott is taking that.

10 Q. Okay. So, that's just Scott taking that from his
11 camera with no -- any kind of mag- -- field magnification?

12 A. That is correct. Yeah, there's correct.

13 Q. All right. And then the -- the cleaning, what
14 did the cleaning consist of? Was it just taking a -- a
15 finger and wiping it off as best you could or you try
16 to --

17 A. Yes. I will tell you based on what I'm seeing --
18 I don't have Scott here to ask him -- but I'm guessing he
19 spit on it and wiped it off with his sleeve or something
20 like that just to clean it out.

21 Q. About how big would you say those indentations
22 and all that because there's really nothing here for
23 scale?

24 A. Just a minute.

25 Q. I mean, there's a ruler or slide -- slide

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1 ruler -- a tape measure in the photo just to the left. Is
2 that the same indents or are those two different areas?

3 A. No, the -- I believe those are the two -- I think
4 those are the same two. I really do. I think they're
5 just turned differently. The -- we didn't chalk those.
6 So, I can't tell you without putting the chalk on it. But
7 the -- the part that has got the debris in it on the left
8 would be about a half inch in size. Yeah. So, that
9 probably would calculate out, if we chalked it, to about
10 1.25.

11 Q. So, a half-inch indentation you're saying was
12 caused by a 1.25 hailstone?

13 A. Well, you have to understand the different
14 between what happens when you get debris in something like
15 this, depending on how deep it is, and how it presents
16 itself when you chalk it and then how using the Koontz
17 method, you extrapolate the size. So, if I chalk this,
18 it's going to show a bigger imprint than just that --
19 that -- that deep impression. So, looking at this based
20 on my experience, I would say that that, if it's chalked,
21 would represent hail in excess of 1 inch.

22 Q. Okay. So, I'm -- I mean, chalk aside, I'm just
23 trying to understand.

24 A. I understand.

25 Q. A half inch indentation, you believe, is caused

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1 by a 1-inch hailstorm or maybe greater than 1 inch?

2 A. Yes.

3 Q. Would you put a range on it, like an inch to an
4 inch and a quarter?

5 A. Not without chalking it.

6 Q. Okay. All right. So, you don't have anything
7 that correlates an indentation size to actual hail size?

8 A. Well, sure, I do. I just mentioned it, but not
9 for -- not with respect to this photo I don't.

10 Q. And when I say, "You don't have anything," I
11 mean, is there some published literature that says,
12 "Generally speaking, this size hail will make this size
13 dent in a metal roof"?

14 A. Yeah, that's what the Koontz -- Koontz does a
15 study on that.

16 Q. Right. Is that the sizing it up?

17 A. Yeah.

18 Q. Okay. Have you ever met Jim Koontz?

19 A. Actually yeah, I had beer with him one time in --
20 God, where was it? Arizona.

21 Q. So, you in Mexico -- New Mexico I mean.

22 A. Maybe New Mexico. I know that's where he's from.

23 Q. Yeah. All right. So, that is the -- was that
24 the -- is that the only one we have, I think, in --

25 A. I think that was the only one we put in here. I

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1 think there is some more in our raw photos potentially.

2 Q. All right.

3 A. Okay.

4 Q. With respect to -- okay. Yeah. Back to the
5 report. Let me see if I get to the right spot. So, under
6 the clean test, when you say, "Crimping was observed
7 throughout the roof consistent with wind damage." And
8 I've just briefly looked at the captions in your report.
9 I didn't see the word "crimping." Is there something else
10 unique to this building that's going on or that did happen
11 during the wind event that we're talking about?

12 A. Well, let me take a look real quick. Yes.

13 Q. All right. What do we go? Tell me. Show me.

14 A. I'd have to look at my -- I -- I have -- just so
15 you know on my screen here I have pulled up some of my raw
16 photos as well. But let's go back to the report.

17 Q. I mean, do you have a -- a file number on the raw
18 photo? I -- I can pull that up --

19 A. Just a minute.

20 Q. -- assuming I have the same photo as you have.

21 A. Okay. So, I -- you can see it. I got it, page
22 17 of 36 of the report.

23 Q. Okay. Where --

24 A. So, you'd have to blow this up, but the photo in
25 the right hand -- you don't see it on this photo very

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1 well -- but at the -- where the two panels come
2 together -- there we go. That's a little better. There
3 we go. Right at the -- so, where the panels come together
4 at the very, very top where they're crimped together by
5 the -- the -- yeah, right there where your hand is.
6 That's perfect. Right there you see a little line running
7 parallel. You see another one coming my direction towards
8 the bottom and then another one. That's the --

9 Q. This -- this over here? This?

10 A. Right there, yeah.

11 Q. Okay.

12 A. That's what I was talking about is the crimping
13 at that top edge. That was different than on the other
14 building, and it also was collocated to the -- the larger
15 impressions on the roof themselves, not the oil canning
16 but the wind damage. So, I believe that there's
17 additional stress that came up the angle of the roof panel
18 and presented itself on that flat edge up on top.

19 Q. So, you're saying stresses came up the standing
20 seam --

21 A. Yeah.

22 Q. -- to the -- to the flat part? And then --

23 A. Yes.

24 Q. -- what -- what -- what actually happened, I
25 mean, to cause that to look like that, do you think?

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1 A. Well, it's funny because of -- if it wasn't a
2 standing seam roof and it was just a mechanically attached
3 roof, we see crimping a lot related to foot traffic. And
4 here it -- it gets really difficult to create foot traffic
5 on this type of a roof because that's a fairly robust
6 assembly right there on the top. There's a lot of metal
7 that comes together and it gets really thick. And the
8 fact -- usually you see if it's -- if it's foot traffic,
9 you see one indentation there and then you might see one
10 on the next panel over where somebody's walking in a line.

11 Here, there -- there's three distinct kinks,
12 if you will, or crimps; and they're also right in line
13 with an area of the roof that is showing a pretty distinct
14 what I believe is a wind-damage signature and not oil
15 canning. I believe that that portion of the roof has
16 become detached.

17 Q. Are you talking about over here to the right,
18 this area?

19 A. Yes. Yes.

20 Q. Okay. And then are you saying that on the left
21 panel at the kind of metal, that little -- I don't know.
22 It's a discolored -- looks discolored in the photo, but
23 these are two signs of detachment of the panels?

24 A. I think they're -- I think it's detached upward
25 and downward of that. That -- those are actually low

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1 spots in the roof that are collecting water. They're
2 puddles.

3 Q. All right. Could the --

4 A. Very large puddles.

5 Q. Could the low spots have just been by footfall,
6 someone walking on the smooth part of the roof?

7 A. I don't think so.

8 Q. Okay. I mean, I understand how walking on those
9 standing seam might not do anything to it. But these are
10 not -- these are unsupported smooth panels. So -- but you
11 don't think footfall could have -- could create low spots?

12 A. No, not like -- I -- I have not seen that in this
13 type of a roof, unless the roof is actually detached from
14 the clips underneath.

15 Q. Okay. What about like some kind of installation
16 issue or something, could that -- is that in a -- in a low
17 spot like that?

18 A. Well, if I -- if I didn't see what's going on
19 further down the roof, where my panels are racked, I might
20 attribute that; but because I also have my panels shifting
21 downward of that, that all seems consistent with wind
22 overload.

23 Q. So, when you say "racking," you're saying that
24 this -- what it looks to be -- appears to be that the
25 panels take a turn to the --

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1 A. Yes.

2 Q. -- to the right after the -- that last panel
3 there?

4 A. Yes.

5 Q. All right. And you don't think that has anything
6 to do with just the optical affect or something with the
7 camera that that's actually the way it exists?

8 A. That's what I saw when I was on the site, yes.
9 Yes, sir.

10 Q. All right. So -- and I just want to make sure I
11 understand. So, there's this -- these very small looks to
12 be lines. And these are the things that you're saying is
13 crimping --

14 A. Yes.

15 Q. -- along right here? So, can you -- just help me
16 understand. What's -- what happens? I mean, does the
17 panel lift up and does it fold in or -- or what and then
18 go back to its normal position? I mean, how does that
19 happen and what actually is happening there?

20 A. We -- I explain it to a jury this way -- I've
21 actually done this on the stand. Take a paperclip --
22 everybody's done this over their lifetime when they're
23 board -- and open up the paperclip. And then take the
24 paperclip and bend it back and forth. And about 50
25 percent of the time when it finally breaks, it will break

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1 and both ends will be upward. And about 50 percent of the
2 time it will be downward depending on when it breaks.
3 This is that same action that's occurring when you bend
4 that paperclip. So, this is that roof at that location
5 moving upward and/or downward. And the result is a crimp.

6 Q. So, pardon my crude -- so, you're saying that
7 like just at that one spot it's -- it's doing like this up
8 and down? If you -- can you see me at all? Can you
9 see --

10 A. It's not doing it now. It did it during the
11 storm.

12 Q. No, I'm not saying now. During the storm it
13 basically went up and went down?

14 A. Yeah.

15 Q. And it -- well, how -- how -- how wide is that?
16 I mean, are we looking at -- is it like a half an inch, a
17 quarter of an inch where it left the crease?

18 A. It's -- it's a very small crimp.

19 Q. Okay.

20 A. It's -- it's not -- it's not creating a storm
21 opening or anything. It's just an indication of panel
22 movement at just location. That's all it is.

23 Q. Wonderful. Okay. Did you -- now, we've seen it
24 in two properties, right? You've got the two properties,
25 JEF and Auburn. And we've seen almost similar type

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1 things. I know you were down to look at other properties.
2 Have you seen this also in some of the other properties
3 that you looked at?

4 A. I didn't see it at the -- the Tri Investments
5 properties that I looked at for another client, this type
6 of -- of panel issue. And I don't recall on the other six
7 without taking a look at it.

8 Q. Okay.

9 A. I'm sure we may get there some day, but I
10 don't -- I can't recall without looking at all those.

11 Q. All right. So, that's the crimping you're
12 talking about. And I don't think -- do we have that over
13 at Auburn? Is that unique --

14 A. No.

15 Q. -- to JEF?

16 A. No, that's why I noted it in the -- in the -- the
17 things that we observed.

18 Q. Okay. All right. And then you've got some torn
19 flashing?

20 A. Yes.

21 Q. Observed in the left elevation link. Oil
22 canning, well, that's the same, right, from --

23 A. Yes.

24 Q. -- different kind of oil canning?

25 A. Same. Same -- same exactly thing we talked

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1 about.

2 Q. All right. Then uplift distortion, canning at
3 fasteners, that's the same, right, as in --

4 A. Yes.

5 Q. -- Auburn? All right. Can you -- can you show
6 me real quick just what photo is the -- the -- shows the
7 torn flashing?

8 A. Sure. Let's see if I can find that.

9 Q. I may have found it. Is that on 1536?

10 A. Yes.

11 Q. Okay. Is that -- would that be this wall
12 flashing, bottom left photo?

13 A. Yes, that's called a reglet flashing, sometimes
14 referred to as a fry reglet. And so, what happens is that
15 metal flashing turns up and it is typically, then, mounted
16 to the wall. Sometimes it has a bend over the top of it.
17 And you cut into the actual panel and you push that end
18 into the actual panel and then you back it up with some
19 sealant. We didn't take it apart to see that, how that
20 was actually done; but in this case that is to me -- that
21 looked like a new opening. And it also did not look like
22 it had historical caulking that was done. That looks to
23 me like that is more consistent with the as-built
24 condition and at least probably one application of some
25 maintenance after original construction.

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1 A lot of times if this is an area that has
2 had lots of problems, we'll see that not only will this --
3 this pookie go up on the wall another 6, 8 inches, it'll
4 come down onto the metal. So, this whole thing will be
5 coated with -- with mastic. And here it's not. So, that
6 to me looks like the panel trying to compensate; and it
7 pulled out of the wall.

8 Q. You think the panel -- this -- are we looking at
9 the same photo here, the bottom left photo?

10 A. This is --

11 Q. Or you looking at the -- this one up here?

12 A. Sorry. Yeah, this one. That -- that one. Move
13 your cursor up. Yeah, right there.

14 Q. Okay. All right. So, middle photo on the right,
15 just for the record, page 2482, you're saying that that
16 separated from the parapet due to wind forces?

17 A. Not wind forces at that specific location. Okay?
18 It's not look the wind hit that specific spot. When the
19 wind hits the -- the -- the overall panel or the panel
20 adjacent to that or the panel adjacent to that, those are
21 all integrated panels. And so, the force of movement of
22 any of those panels would transfer over to this spot.
23 This is the weak spot. So, that's where it would evidence
24 itself.

25 Q. And you think that this --

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1 A. But while you're out -- while you're out looking
2 for panel separation at the intersecting panels, you're
3 missing where the damage actually evidenced itself. And
4 this is -- this would be called a weak spot between two
5 dissimilar materials, the concrete and the panel.

6 Q. All right. What impact does thermal movement
7 have when the metal is screwed or attached to concrete?
8 They -- they don't move at the same rate, right?

9 A. Absolutely. That's why you have the caulk there.

10 Q. Right.

11 A. And that to me because the tear in the caulk --
12 in other words, you could push those two pieces back
13 together again and they would perfectly align. That to me
14 is cohesion failure. That is consistent with that caulk
15 being stretched beyond its stretchability. That's
16 typically consistent with very quick movement from wind.

17 Q. All right. Even though the rivet is -- looks
18 like it's still in place and it --

19 A. Well, it's still in place but look how it's
20 pulled out. I mean, it is -- the rivet is not pulled out,
21 but the metal is -- is -- the metal tried to pull through
22 the roof -- rivet and it created that indentation at the
23 rivet itself.

24 Q. So, you think there is a gap between this piece
25 of the flashing and the concrete wall?

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1 A. Yes, absolutely.

2 Q. Okay.

3 A. I think you could take a -- a very thin flat
4 piece of metal and -- and stick it down there and probably
5 even see it on the inside if it was long enough. That's a
6 storm-created opening.

7 Q. So, did the rivet pull through the concrete a
8 little bit?

9 A. No, I don't it did. I think -- I think the
10 rivet's still in place. It may have come loose, but
11 certainly the -- the -- the metal deformed at the rivet.

12 Q. Oh, so you -- so, it's inside a little bend. You
13 think that's from wind, not from installation?

14 A. Yeah, I think that's from deformation of the
15 panel caused by wind, yes.

16 Q. All right. Oops. Sorry. Wrong one. Okay. All
17 right. So, we were talking about torn flashing. Is that
18 the example or did this other wall flashing picture in --
19 is that also evidence of torn flashing?

20 A. Yes, that's another example. That's what I
21 thought. And I see -- what I see on this picture is I see
22 two -- two layers of patching material on there. I see a
23 white elastomeric and then I see a gray product over the
24 top.

25 Q. Does that indicate attempts to -- to make repairs

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1 at that site --

2 A. At least twice -- at least twice since original
3 construction.

4 Q. Okay. Are you saying that this separation
5 occurred during the May, '17, storm?

6 A. It sure looks like it because I don't have that
7 material inside of it.

8 Q. I'm sorry. You don't have what?

9 A. I don't have the -- the white material or the
10 gray material inside and I have cohesion failure where
11 it's been torn right down the middle.

12 Q. Okay. So -- but if it hadn't been -- okay.
13 Well, if it hadn't -- if it hadn't been previously torn,
14 why would they be putting cement on it -- sealant on it?

15 A. Well, as a -- as a matter of course when that
16 type of a flashing joint is put together, you can either
17 put a separate piece over the top of it that extends
18 beyond the joint say 4 or 5 inches either direction of cap
19 flashing or you can caulk the joint. They chose to seal
20 that joint most likely at original construction. That has
21 now opened. It may have opened before, sure. But then
22 they patched it. And now it's opened again. So, it was
23 functioning likely when the storm hit; and then opened
24 again.

25 Q. Okay. All right. So, the same forces that may

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1 have caused it to open it after initial construction when
2 they applied sealant began, those forces would not be
3 present any more and that's why you think it's storm
4 related and not some ongoing issue?

5 A. Based on the fact that they were performing
6 routine maintenance on this building, if this were a
7 concerned area, I would have expected it to be loaded with
8 tar and it's not. That's what I typically see when
9 there's a -- an area that is continually leaking. This
10 looks to me like reasonable maintenance that somebody went
11 up and said, "Here's a joint. Let's caulk it."

12 Q. You've not talked to anybody who's done the --
13 the actual maintenance work on these roofs, right?

14 A. I have not.

15 Q. Okay. So, we don't know what they do, their
16 means, their methods. Okay. AC units, let's go back a
17 page here. We've got the -- I guess this is an older
18 unit. It's gotten, what do you think, more than one hail
19 storm at this property?

20 A. That tends to look -- they all look about the
21 same size. There's some littler ones. But again, as I
22 indicated before, the -- the -- in my review of the file
23 when I put this all together, I didn't think the air
24 conditioners were in question about being damaged by hail.
25 The -- the -- the insurance estimate initially I think on

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1 both of these properties indicates that they saw damage
2 and that the damage needed to be fixed. They allocated
3 combing. So, I would look at that and say, okay, if I'm
4 measuring what here would be -- based on the Koontz method
5 would be about an inch and a quarter to an inch and a half
6 hail hit and the insurance company has agreed that that is
7 damage that caused -- that they have paid for for a
8 May 21st event, then I -- anything else I see in that size
9 on the roof would also be related to do that -- that storm
10 event.

11 Q. All right. And if you saw smaller hail
12 indentations in the fins and maybe we could see some
13 smaller ones?

14 A. Yeah, that's pea-sized hail. That's probably --
15 well, could that have happened in this storm? Sure. I
16 think that, you know, what we tell a jury and -- and
17 you're old enough, counselor, to remember, you know,
18 Mr. Green Jeans it's a TV show that we all saw as kids.
19 And when Mr. Moose used to drop the ping-pong balls and
20 laugh at the beginning of the show, hail doesn't fall in
21 one size during a storm. It's not all one size ping pong
22 ball. It's a variety of sizes that occur from the storm.
23 So, I would not be surprised to see pea sized, inch and a
24 half. Quite frankly there may have been a 4 inch piece of
25 hail that fell on this site. We didn't find it. But that

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1 doesn't mean it didn't happen. It could have. The
2 majority of the hail appeared to be in this 1.25- to
3 1.5-inch range.

4 Q. Well, I confess. We only had one channel when I
5 was growing up.

6 A. Oh, okay.

7 Q. So, I didn't view that show.

8 A. All right.

9 Q. It was before cable. I'll give you that.

10 A. It was.

11 Q. All right. So -- All right. So, you see
12 evidence -- all I'm asking is you got evidence of
13 possible, multiple hail events in these condenser vents
14 because that's all?

15 A. It is Texas after all, yes.

16 Q. All right. Then we've got some -- well, shoot.
17 Sorry about that -- photos down at the bottom of page
18 2481, impact damage to sign. What size -- is that hail
19 and if so, what size do you think made that damage?

20 A. I'd have to look at the photo closer.

21 Q. Gosh. Let's see. Well, I'm happy to zoom in.
22 At some point, the pixel --

23 A. There you go --

24 Q. -- isn't very great.

25 A. There you go. That's good. That's good. That's

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1 good. So, we have probably accumulation of some pea-size
2 hail on here. We have some half inch. We have some
3 larger hits here that could be inch and a quarter. I
4 don't see much bigger than that on here. Potentially way
5 over on the right at the top of the picture, there's --
6 you can just see emanating from the top of the picture
7 what looks to be a fairly large hail strike on the
8 45-degree angle piece of green material. That looks like
9 a larger hail strike. But we don't capture the whole
10 thing in the photo.

11 Q. And we don't know when these -- if this is one
12 storm or multiple storms based on the hail sizes alone?

13 A. Correct, yeah.

14 Q. All right. Let's get back to normal size here.
15 Next page, we've got the parapet wall, the -- now, this
16 time the arrows are pointing to the circles. So --

17 A. These are different circles, though. The other
18 ones didn't -- there's actually section loss in these.

19 Q. Okay. So, you're saying there's actually some
20 depth missing here?

21 A. Yes. These actually chipped the concrete.

22 Q. All right. And -- and do you know that strictly
23 from the photo or something that you had to see and then
24 you remember when you looked at the building?

25 A. I just remember seeing that on the parapet wall.

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1 Q. Okay. So, we can't really tell from the photo;
2 need to be there?

3 A. No. Can easily tell that.

4 Q. I'm sorry? You agree with me --

5 A. I can tell from the photo, but I can also -- I
6 also know when I was there.

7 Q. Okay.

8 A. Yeah. And there was some -- I will stipulate
9 that there was some chipping of the concrete on the top of
10 the parapet wall. That is not causing damage to the
11 property. Okay? It is an indicator of the hardness of
12 the hail.

13 Q. Okay. All right. So, that's why you photograph
14 it, not because it damaged but because it tells you how
15 hard the density of the hail that fell?

16 A. Yes.

17 Q. All right. Can you tell from this photo when
18 this hail fell on this parapet wall?

19 A. Not precisely. It's -- not precisely, no.

20 Q. All right. Then the next photo -- excuse me --
21 to the right -- well, one of these arrows lost its head,
22 but the arrows are pointing to hail indentations, all five
23 of them, all five of the arrows?

24 A. I -- I think they are, but they -- they may be
25 off. That sometimes happens in the transfer. So --

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1 Q. Okay. So, like the one that's missing its head,
2 that's -- it's probably the -- this area right above
3 the --

4 A. Yeah. I think the other one is actually -- it
5 should be moved down a little -- no, it's missing the --
6 the hail is just to the left of it.

7 Q. So, if I moved it over here?

8 A. Right there. Yeah.

9 Q. Okay.

10 A. Looks kind of off.

11 Q. And then the middle one is -- is this the hail?
12 It looks --

13 A. Yeah, that's showing a fairly -- a fairly large
14 indentation, yes.

15 Q. Is that one hailstone or multiple hailstones?

16 A. Well, I can't tell from the photo; but it's a --
17 it's a good hit.

18 Q. And, again, because if it was -- it's wet, you
19 can't, sorry, see any spatter associated?

20 A. Correct.

21 Q. -- with these indentations?

22 A. Correct.

23 Q. But you don't see any rust in them, right?

24 A. No.

25 Q. All right. Back to the chipped concrete, what

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1 part of the parapet are you focused on on this photo here
2 on the middle left of Brabo 242?

3 A. What part of the parapet?

4 Q. Yes.

5 A. That large gray spot that measures about an inch
6 and a half.

7 Q. All right. So, that is actually missing some
8 concrete material?

9 A. Yes.

10 Q. All right. All right. I wasn't sure if you were
11 talking about this part right here, the --

12 A. No.

13 Q. -- black is on -- okay. And then we talked about
14 the flashing. And you don't think that has anything to do
15 with aging or drawing out of the sealant?

16 A. Well, if it did, the sealant would be checked.
17 What happens when the sealant is exposed to -- to sunlight
18 is it alligators and checks. There's no checking anywhere
19 on that sealant.

20 Q. I mean, would you call that sealant or caulk?

21 A. Well, it's caulk but --

22 Q. Okay. And then caulk you're saying when it dries
23 out, the telltale sign that it's dried out is a
24 alligatoring effect?

25 A. Alligatoring and checking. You can actually see

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1 that on the tilt-up walls, when you look at that caulk
2 that was installed between the panels. You can see how
3 that has checked with age.

4 Q. All right. And I'm sorry. Help me some. What
5 do you mean by checked?

6 A. Alligatored.

7 Q. Alligatored. Okay. All right.

8 A. Yeah.

9 Q. It has a distinct kind of pattern to it?

10 A. Correct.

11 Q. Okay. I understand. And, then -- so, what's
12 happening in this -- back to this panel shifted wall
13 flashing, looks like there already been maybe some rivets
14 here during initial install that -- that may have sheared
15 over time. Do you know what's going on there?

16 A. No.

17 Q. Okay. Well, let's call this the panel in the
18 foreground. It's actually attached to a different parapet
19 wall than the matching panel to the right, correct,
20 because here's the -- here's the seam?

21 A. Yes.

22 Q. Okay.

23 A. Yes, they -- they -- there are two tilt-up panels
24 in that photo.

25 Q. All right. And so, we have two pieces of metal

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1 attached to two different tilt-up panels?

2 A. Yes.

3 Q. Okay. So, are these cleaned or uncleaned over
4 here to the bottom right on page 242?

5 A. I think those would be representation of cleaned
6 with spittle quite frankly. That's all they use.

7 Q. Didn't use a cloth or something to try to get
8 down and see the spangle --

9 A. Correct.

10 Q. -- or the coating? All right. Going through the
11 photos. Next page, I think we talked about this already.
12 This was your clean/uncleaned hail hits. What is going on
13 in the temporary repairs to roof phot on Brabo 2483,
14 middle left?

15 A. Well, somebody puts an elastomeric coating at
16 this location of the roof. So, we can't examine really
17 anything there, other than noting that it's got temporary
18 repairs.

19 Q. All right. You're not trying to say that the
20 coating was made necessary by the 2017 event?

21 A. We can't date that at all.

22 Q. Okay. And then you've got a picture, the right,
23 middle right, you call it panel distortion with vent
24 fastener?

25 A. Yeah.

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1 Q. What are we looking at there?

2 A. That fastener is bent. I mean, it's --

3 Q. All right.

4 A. Yeah.

5 Q. That fastener?

6 A. Yep.

7 Q. Okay. And it's -- I mean, it's not angled
8 driven, it's -- it's bent?

9 A. It's actually bent. It's -- it's -- yeah, it's
10 bent towards the -- away from the -- where your arrow --
11 where are you right now. Again, you can't install it that
12 way. So, that would have to have been caused by a pretty
13 good force of some kind, typically the wind event.

14 Q. Would the -- if -- if that were caused by wind,
15 would it show up in other places in the same area or would
16 it just be confined to the bending of the screw?

17 A. Well, no, as I indicated before, it might show up
18 as panel crimped down wind -- or down -- down slope of
19 that it might show up as -- if you look at the photo on
20 the left, okay?

21 Q. Yes, sir.

22 A. So, the photo on the left where they've done the
23 temporary patching, we -- we can't see what's underneath
24 there. It all looks fairly new and fairly fresh in terms
25 of its color. So, presumably it was done after the storm

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1 event. We don't know. But assuming it -- if it was, you
2 could have a bent fastener that would then evidence with
3 stress down the line and cause some of that flashing to
4 pull away from the parapet potentially.

5 Q. Okay. Because I have the photo, I think, in the
6 same series as that closeup there on the middle right.
7 You see this -- this is your photo 6361. And I'm pretty
8 sure I'm in the same area because I have this, whatever,
9 this debris collection. Can you see where I'm seeing,
10 Mr. Irmiter?

11 A. Yes.

12 Q. Okay. So, I think if we zoom in here, maybe that
13 helps a little bit. I think we're looking at this screw
14 which is to the left of the joint. And this is right at
15 the -- is this at the front of the building?

16 A. Yes.

17 Q. Okay. And, of course, it's hard to see that the
18 screw is angled from the bird's-eye view. But what I'm
19 curious about is if this -- if this flashing moved in such
20 a way that bent that screw, wouldn't we expect to see some
21 other signs of bending, crimping, kinking in this general
22 area somewhere; and do you see any?

23 A. Well, you see it right at the intersection of the
24 two pieces of flashing where the --

25 Q. Right here?

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1 A. -- sealant and caulk has been sheared in section.

2 Q. All right. So, let me zoom in.

3 A. So, absolutely, that would evidence itself right
4 there.

5 Q. All right. So that?

6 A. Yep.

7 Q. Torn up?

8 A. Yes.

9 Q. Okay. All right. And then this gap between
10 the -- the two flashing panels, would that be sign of that
11 too?

12 A. Sure, if the panel shifted a little bit, yeah.

13 Q. All right. And if the panel shifted, would other
14 screws have been displaced or torn or bent?

15 A. It's possible.

16 Q. -- in the process? Okay.

17 A. It's possible, sure.

18 Q. So, this very -- very next screw, that one, we
19 should expect to see that bent?

20 A. It's certainly possible, yeah.

21 Q. Okay. And then the -- I don't know what this is.
22 Is that a satellite dish? Is that like an LNB on a
23 satellite dish?

24 A. Yeah.

25 Q. All right. Are you -- is it your opinion this

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1 happened during the May 21, 2017, event?

2 A. Don't know. We're just indicating that there is
3 some damage there.

4 Q. Okay. Didn't price that out, right?

5 A. No.

6 Q. Okay. What is this -- looks like the creature
7 from black lagoon here on the right.

8 A. Yeah, this is a panel that when you walk on it,
9 the -- the panel moves substantially up and down. It's
10 detached from the fasteners underneath. And this was new
11 tar. You can tell by the color. This was put in, we
12 believe, after the storm. And the problem with this type
13 of repair is the panel will continue to move even at lower
14 wind speeds now because it's detached. That particular
15 material, once the sun hits it for a while, is gonna dry
16 down and not have any stretchability. So, it's going to
17 break open again.

18 Q. And this is not damage from foot traffic that
19 caused this?

20 A. I don't see a footprint on it. So, no, I don't
21 think so. I think that's damage from the storm that was
22 temporarily patched.

23 Q. Yeah. How about underneath it. I mean, is it --
24 could someone damage it by walking on it and then they
25 patched it with this stuff so you wouldn't see --

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1 A. Well, no, because the panel around that whole
2 area is loose from its fasteners underneath. So, that
3 wouldn't happen with a foot.

4 Q. Now, this is down by the gutter, right?

5 A. Yes.

6 Q. Okay. And it -- would it have happened -- and
7 so, when you say it's detached, has it come unscrewed or
8 unclipped?

9 A. Unclipped.

10 Q. Okay. Because there's also rows of screws right
11 down there as well, right, where they attach to the
12 purlins?

13 A. Yes.

14 Q. Okay. And so, this is the -- the transition from
15 the panel to the -- the -- the gutter? Is that where this
16 is?

17 A. Yes.

18 Q. Okay. And so -- but only one -- I think you've
19 only got one picture from one repair at one panel. So, if
20 it had become detached, wouldn't the forces also have
21 applied to the adjacent panels that caused it to detach?

22 A. It -- yeah. What we're trying to exemplify or
23 show here is that this area when you push on it, moves up
24 and down. That shouldn't be happening. We believe the
25 reason it's moving up and down is because it was damaged

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1 by the wind. And you could put as much of this tar on
2 there as you want. That's not gonna correct the problem.
3 That's all we're trying to show. And I think that that --
4 I believe that is from the wind event.

5 Q. From May of 2017?

6 A. Yes.

7 Q. Breezing through these photos. This is page 17
8 of 36, Brabo 2484. Typical hail impact damage. Almost --
9 almost looks like identical to what we saw earlier. Are
10 these the same as what we saw earlier?

11 A. Well, they shouldn't be, but it's not -- it's
12 possible.

13 Q. Okay. Okay. And then -- all right. And then
14 we've got some rivets have been sheared in this -- back to
15 that -- the flashing there at the parapet?

16 A. Yes.

17 Q. All right. So, we may have already looked at
18 this. Trying to -- let me ask you just a question about
19 technique here. So, see how this middle picture is the
20 aspect ratio is -- it's pretty much, I want to say, the
21 same height -- maybe it's a little taller -- than the
22 pictures above and below it. But it's clearly twice as
23 wide as the pictures above and below it. Do you know how
24 that happened?

25 A. Yeah, just pull and stretch it.

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1 Q. Okay. And do you know how the pulling and
2 stretching complies with -- didn't you say there was a, I
3 guess, an ASTM standard in terms of how you keep photos at
4 the same -- how -- as you took them?

5 A. I think the photo accurately represents the
6 condition on the roof, if that's what you're asking.

7 Q. Okay. You --

8 A. It has not been photoshopped.

9 Q. I'm not saying it's been photoshopped. And so,
10 the aspect ratio is stretched so that it causes some
11 distortion in the photo, doesn't it?

12 A. No, I don't think it does at all. Anyway --

13 Q. You think that guy's foot's that wide?

14 A. Yeah, you ever met that guy? Big guy.

15 Q. All right. And then what do we have here, more
16 of this oil canning or cleaned up with or what did you
17 call it, lacking earlier?

18 A. Well, I -- on the right-hand side certainly.

19 Q. Okay. What about left here where you've got at
20 least a leg of a tripod in the foreground, what's going on
21 there?

22 A. That's a -- a tower, antenna tower they have
23 mounted on the roof.

24 Q. Yes, sir. It says, "Roof panels detached."
25 Where are they detached?

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1 A. That middle area when you walk on that is --
2 right in -- all the way through there is -- is loose when
3 you walk on it.

4 Q. So, it's soft when you walk on it?

5 A. No, it's not soft. Running left to right, okay,
6 running -- yeah -- all the way along that area. Further
7 down. Further down. Right in that -- there you go. All
8 the way along there, when you walk on that, it has -- it
9 feels that -- that it is not anchored to the roof any
10 more.

11 Q. So, right here where the screws are, you're
12 saying it's lost its anchor?

13 A. On either side of it, yes.

14 Q. Okay. And that's something we can't see. We
15 have to be able to go out there and -- and feel it when
16 you walk on it?

17 A. No. I think that the pictures represent -- right
18 there, you can see the distortions.

19 Q. So --

20 A. We didn't blow them up.

21 Q. -- the starting to turn to the left, you're
22 saying is evidence of a -- of a loose -- of panel
23 detachment of the clips?

24 A. Yeah, that's part of it, but it's the -- I can't
25 draw with a cursor. You have control of that. In a trial

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1 I will be -- easily be able to show this. But running in
2 between -- so, the panels are 25, 30, 40 feet long,
3 whatever. Let's call that running from top to bottom on
4 this photo. Running right to left on this photo,
5 coming -- starting at about a foot upward of where all the
6 screws are, where you just had your cursor.

7 Q. Okay.

8 A. Look at all of those lines. That is not oil
9 canning. That is damaged panels.

10 Q. Okay. All right.

11 A. Running right to left.

12 Q. So, the -- it's running perpendicular to the
13 seams?

14 A. You're in the wrong -- you're in the wrong
15 location. You got to come to the bottom of the photo.

16 Q. Okay.

17 A. Come -- right there. Yeah -- no. To right -- a
18 little bit closer to the seam. Right there, the end.
19 Yeah. All the way along there, right to left. You can
20 see all the panel distortion.

21 Q. Across every panel or just some of them?

22 A. Every panel.

23 Q. So, has this whole section become unclipped?

24 A. We believe so, yes.

25 Q. Okay. And then the -- the test for that is when

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1 you stand on it, it feels different than a clipped section
2 of panel?

3 A. Yes.

4 Q. Okay. All right. Now, we're back to IR. And,
5 again, I -- I take it your position is that these are
6 areas in where water has, I guess, pooled in the -- in
7 between the roof panels and the insulation?

8 A. There is -- there are anomalies. They're
9 differences in temperature. They would be consistent
10 based on my education, training and experience of water
11 that is trapped in the assembly.

12 Q. Did anyone do a moisture meter probe of -- of
13 these areas?

14 A. No, we did not have a scissors lift and access to
15 do that.

16 Q. And, again, no one attempted to trace the means
17 of the rainwater coming in that is pooling -- apparently
18 pooling in these -- insulation?

19 A. We believe that the means were presented in the
20 photos up above that we've already gone through. So,
21 anyway...

22 Q. All I'm saying you can't take me to a photo and
23 say, "Yeah, see this right here? If you go to this photo
24 over there, that's where that leak is coming from; that's
25 where that water's getting in"?

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1 A. That is correct. There are so many leaks on this
2 roof now that it's impossible to isolate them. To run a
3 test and a water tracing on this roof, would destroy the
4 building.

5 Q. Okay. And no one has attempted to do that that
6 you know of?

7 A. Well, you destroy the building. You'd have to
8 flood the roof. There's too many opening in this roof to
9 do that. So...

10 Q. Well, I mean, you -- you said you relied on the,
11 I guess, leak tracing or something of the public adjuster?
12 Do you remember that?

13 A. Yeah, we certainly looked at that, absolutely.

14 Q. Okay. But he didn't attempt to connect the dots,
15 did he?

16 A. No, he did not.

17 Q. Okay. All right. I'm sorry. I jumped ahead
18 here. Photo on the bottom of page 20 of 36, again is this
19 the same kind of window issue that we talked about with
20 the Auburn building?

21 A. Yes.

22 Q. Okay. And you think this occurred on May 21st,
23 2017?

24 A. I do, yes.

25 Q. All right. Let's talk about this tilt-up wall

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1 panel on JEF. What's going on here?

2 A. The -- the panel is pushed out of its original
3 position.

4 Q. Okay. And how does that happen?

5 A. Well, it can happen, in my mind, in probably
6 three different ways, maybe four different ways: One, it
7 could be related to poor installation. It could be
8 related to foundational issues. It could be related to an
9 impact by, say, a vehicle or something like that. And it
10 could -- or it could be related to wind. In this case we
11 think that it presented itself as possible wind damage.

12 Q. All right. So, that -- what evidence is there
13 that would rule out the other possible sources other than
14 wind?

15 A. We checked the foundation and did not see any
16 foundational damage in this location. There was no
17 evidence of a vehicle strike, and there was no evidence of
18 improper installation.

19 Q. And so, just by elimination, you kind of came up
20 with wind?

21 A. Yes.

22 Q. Was there any cracking in the sealant or caulking
23 or whatever it is up at the top that would -- you said
24 earlier would be present if it were wind related?

25 A. There's evidence of patching at the top that had

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1 been done --

2 Q. Okay.

3 A. -- in that sealant, I believe.

4 Q. I think when the guys were inside, they took the
5 some photos of this same area. Let's see if I've got it.
6 Yeah. I'm thinking this is the same area. So, if you
7 don't agree, that's fine. Let me show you the interior
8 portion of what I think is that same tilt-up wall. Do you
9 see that photo with the overhead door?

10 A. I see the overhead door, yeah.

11 Q. Yeah. And you see the -- the separation here in
12 the panels? This one looks like it's in. This one looks
13 like it out. You see that there?

14 A. I do see that, yes. I don't know that that could
15 be correlated to what we were seeing on the outside.

16 Q. All right. All right. But if it is, then, how
17 could you explain that at the top where the brackets are,
18 it's actually even and level and there doesn't appear to
19 be any damage or separation going on up at the top, if
20 this is when?

21 A. But that's the question, if it is. I'm not gonna
22 speculate. This -- that picture was taken for the garage
23 door.

24 Q. Oh, I understand.

25 A. It wasn't taken for the wall. So...

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1 Q. So, you're -- you're -- you don't know?

2 A. No, I don't know.

3 Q. Okay. Get it back. And then the -- the report,
4 I think the next page, yeah, just a closeup with a ruler
5 or, excuse me, a tape measure. All right. Did you price
6 this out as if it were wind damage from 2017?

7 A. I do not recall what we did in this particular
8 location with regard to this without looking.

9 Q. All right. And, then, again, this is the one or
10 two photos on page Brabo 2489. These are same kind of
11 windows, separation thing going on that we've been talking
12 about?

13 A. Same condition, yes.

14 Q. All right. And then -- we got some interior
15 photos. Some ceiling tile. Looks like some -- what is
16 that -- just paper on the Sheetrock that's starting --

17 A. It's Sheetrock that's -- that's bubbled off, yes.

18 Q. Yeah. All right. Any idea where this is in the
19 building and how the water -- what part of the building
20 water's getting through?

21 A. No, I could figure that out but not as I sit here
22 right now. I don't remember.

23 Q. And that's gonna be the same for these other -- I
24 think I'm -- yeah, same -- same for photo on the top
25 left --

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1 A. That's the same -- that's the same photo. That's
2 a closeup of the one you were showing before.

3 Q. Okay. All right. Yeah. What is going on here,
4 top -- it's the top right photo on page 2491, wall to
5 steal web is broken at tilt-up. I don't know.

6 A. Yeah. So, there's a break right -- so, right in
7 the middle of that -- that top photo on the right?

8 Q. Yes, sir.

9 A. Move to left. Right there. That is actually a
10 weld plate that was -- that is embedded into the -- it's
11 part of the tilt-up concrete panel, and that panel is then
12 attached to the structural framing. And it's pulled away.
13 So, the wall is actually pulled away from the structural
14 framing.

15 Q. And this is a closeup here in the middle left
16 photo?

17 A. Yes. And there's no paint behind there. It --
18 it looked fairly -- fairly new to us. So...

19 Q. All right. Are you -- is it your opinion this
20 happened during the May 21, 2017, event?

21 A. It certainly could have. I don't know how we
22 address that in the estimate. I'll have to look.

23 Q. Well, are you going to testify that more likely
24 than not within reasonable, whatever, building science
25 probability this did happen in May of 2017?

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1 A. I'd have to take a peak at my photos again. Just
2 a second. It's that weld, right? Bear with me for one
3 second. Yes, we think this is attributed to the wind
4 event.

5 Q. And so, what happened to actually cause the
6 separation during the storm?

7 A. I think the wind gave the wall a good whack. It
8 moved this, separated and now we need to put it back
9 together.

10 Q. And what's the fix for that?

11 A. Well, that's -- that's -- that's the problem.
12 It's gonna have to be an engineered design of some type of
13 a -- some type of a fastener that's gonna have to be put
14 into that whole thing. What we have is some epoxy
15 injection at the concrete where it's cracked. We did not
16 have, I believe, a cost for engineering in our estimate
17 for putting this assembly back together. So, we are
18 dealing with more of the -- the cosmetic and the caulking
19 issues that have resulted from this movement. In other
20 projects -- we have another project look this where the
21 panel moved. This was last year where we're actually
22 taking -- allocating to take -- put in temporary support,
23 detach that panel and put a new panel in. But that is not
24 contemplated here at this point.

25 Q. And the -- the building science term of art is

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1 that wind whacked the panel and -- is there any -- can you
2 explain it a little bit?

3 A. Sure.

4 Q. Just a little bit more detail than that, please?

5 A. Yes. The wind -- one of the hot pressure zones
6 on this building is the -- the exterior wall and the
7 parapet. And if the forces are great enough attacking
8 that parapet, the area above, two things will happen: If
9 the parapet is made out of concrete masonry units, CMU,
10 or brick, then typically the parapet will break off.
11 That's why bracing parapets is now required with those
12 kinds of assemblies.

13 In this situation, it's one tall piece of
14 concrete. And so, that part that sticks up above the
15 roof, when it gets hit by wind, it doesn't break because
16 there's no cold joint to break; but it pulls. It pulls
17 away from the building. And this would evidence itself at
18 this type of a joint and at the areas between the adjacent
19 panels, which is what it did. So, this is isolated to one
20 location on the building.

21 Q. So, would the -- would the forces have been the
22 same along the entire -- the same side?

23 A. Oh, absolutely. Oh, yeah. But that doesn't
24 mean -- but that doesn't mean every panel's gonna react
25 the same way. That's the beauty and the frustration about

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1 wind damage. You can have a wind hit a building and have
2 different parts of the same wall of that building react
3 differently.

4 Q. Did the wind hit on the ex- -- let's see -- on
5 the outside and push the panel in to the framing structure
6 or did it hit -- did it come across the roof and -- and
7 hit the upper part of the parapet forcing it away from the
8 structural steel?

9 A. Based on this photo, it appears that it forced it
10 away and a bit to the left.

11 Q. Okay. And your position is it's not a function
12 of construction or construction defect or some kind of
13 issue manmade?

14 A. No.

15 Q. Okay. More window frame displacement, same kind
16 of stuff that we've been talking about. Nothing different
17 here, right?

18 A. Yes.

19 Q. Page 2493 is old/new pictures of the interior.
20 And then just some more -- I believe you're saying this is
21 either damaged insulation and/or insulation that has
22 gotten wet or is getting wet?

23 A. Yes.

24 Q. That's what we're looking at. Okay. More of the
25 same. Okay. So, at the -- Brabo 2493, we've got some of

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1 the insulation issues we've been talking about there at
2 the bottom. Tilt-up panel shifted; closeup of previous
3 photo, is this the interior of the exterior panel that we
4 were looking at where there's like an inch or so
5 displacement between the panels we talked about earlier
6 from the outside?

7 A. Yes.

8 Q. Okay. Because I -- I thought would have been on
9 page 21 of 36?

10 A. Yes.

11 Q. Okay. And so, when I showed you Photo 6173 and
12 you said the focus was on the door -- let me just see if I
13 can -- if I can't -- here I'll just go back and switch it
14 over and show you. You see that, the little sign, vortex
15 and everything?

16 A. Yeah.

17 Q. And see the cable coming down and the little box
18 here and then the shifting panels?

19 A. I do.

20 Q. You don't think that's the same panel now that
21 you see this in context?

22 A. I don't -- I don't know. I need to see that
23 other photo.

24 Q. Okay. All right. But if the brackets are in
25 place up at the top, does that maybe give you an idea

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1 maybe something else happened and not wind?

2 A. At this location, possibly?

3 Q. Okay.

4 A. Not at that other location.

5 Q. What other location?

6 A. The --

7 Q. Oh, with the steel framing?

8 A. Yeah.

9 Q. Oh, no, I've got that.

10 A. Yeah.

11 Q. Let's see what we got here. All right. Window
12 damage. We talked about window damage. Okay. Stolk
13 report. And, again, I know that you are just in essence
14 copying and pasting from the Stolk report into yours and
15 you're not actually editorializing or commenting, right,
16 on this, on the Stolk report? Did I cut off?

17 A. No, I'm just -- I'm contemplating your question.
18 I'm sorry. That was a multifaceted question. Can you
19 break that down into maybe one question at a time?

20 Q. Okay. So, what we have here at paragraph -- or
21 portion 6.0, Brabo 2495, that is a -- you're just copying
22 and pasting from the Stolk report there, executive summary
23 and conclusions. You're not adding anything to that?

24 A. In that section, no, but I add emphasis, I
25 believe, later in the report when I do that again.

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1 Q. Yeah.

2 A. And I've added -- adding emphasis because I would
3 certainly -- based on my having reviewed, taking these
4 kinds of photos, looked at them under the microscope
5 myself, I would certainly, if asked to comment on what am
6 I seeing, what I'm seeing.

7 Q. Okay.

8 A. That's it. I mean, I -- I can't comment on
9 anything other than what the photograph depicts to me.

10 Q. Sure. Are -- have you done any metallurgical
11 hands-on work yourself?

12 A. Yes, yeah.

13 Q. Okay. All right. So, you know that preparing
14 the mounts is probably one of the most important things
15 you can do, right?

16 A. Well, preparing the mount is the most important
17 thing you can do with any microscopy that you do. And
18 that takes most of the time quite frankly.

19 Q. I'm sorry.

20 A. Yeah.

21 Q. So, if you have mounting errors, it's gonna skew
22 the results, right?

23 A. Not only if you have mounting errors, but in the
24 field that you're looking in, what are you looking at?
25 So, you know, we -- we put that -- we put that template

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1 and -- and -- understand you're looking at a cubic
2 centimeter or less of space sometimes. So, there could
3 be -- I mean, in a 6-by-6-inch square, hundreds of
4 thousands of cubic centimeters within that field that you
5 are picking through to look for. So --

6 Q. Yeah.

7 A. -- yeah, it is -- it is an art. There's no
8 question about it.

9 Q. Got you. All right. On 7.5, again we're calling
10 for 1 -- 1-and-a-quarter to 2-inch hail. Is that
11 basically the same hail at both properties from the same
12 storm?

13 A. Yes.

14 Q. Okay. Did you guys -- did your team or did you
15 note any type of skylight cracking or damage to either of
16 the properties?

17 A. No.

18 Q. And then we go 8.0, what -- here we go again.
19 This is the Stolk Lab re- -- reducts, I guess, again with
20 emphasis?

21 A. Yeah. I don't have anything on my screen. If
22 you have something you want me to look at, can you put it
23 up?

24 Q. Oh, my gosh, I stopped the sharing. My problem.
25 I apologize.

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1 A. Yeah.

2 Q. Brave new world. All right. Here we go.

3 A. Thank you.

4 Q. You see -- here, I'll make it one -- one screen.

5 Under conclusions, 8.2, that's the Stolk reducts?

6 A. Yes.

7 Q. With emphasis this time?

8 A. Yes.

9 Q. As they say. All right. Let me pull something
10 up here. All right. This is JEF. Okay. The -- let me
11 show you the JEF Stolk report because what I think
12 happened, may have happened. And I just want you to let
13 me know if that's the case, is that you may have copied
14 the other section in JEF from Auburn because I don't
15 believe it's word for word the same as the Stolk report.

16 A. That may -- that may have occurred.

17 Q. Okay. So, then, the -- if this is from Auburn,
18 if in your JEF 8.2, that's right out of the Auburn, then
19 you're not attempting to change the Stolk conclusions, are
20 you, between JEF and Auburn?

21 A. No.

22 Q. Okay. That's just a, I guess, what we call a
23 manuscripting issue?

24 A. Yes.

25 Q. Okay. All right. I mean, I can show you. It's

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1 pro -- pretty much every paragraph's got -- like, for
2 example, in number one, Stolk has aluminum zinc. In yours
3 you just have aluminum.

4 A. Got it.

5 Q. Okay. So, no -- nothing -- nothing -- nothing
6 going on there other than just a -- I guess, a typo?

7 A. Yes.

8 Q. Okay. All right. Let me go back to the report.
9 All right. Am I back on your report here?

10 A. You are.

11 Q. All right, sir. And then we've got -- we've got
12 the same quote from MCA installation manual. And again,
13 this is you, the e.g. -- on Paragraph 8.3, the e.g., for
14 example, that's you, that's not from the manual, right?

15 A. Correct.

16 Q. Okay. Now, there's an interesting phrase here in
17 8.4 of Brabo 2499, based on similar projects, the age and
18 condition of the panels and the roofing company's
19 manufacturer. I don't remember that being in the Auburn
20 report. Who is the roofing company's manufacturer of JEF?

21 A. I don't know how that made that in there. That
22 may also be an editing error on our part from a template.
23 I don't believe we know who the manufacturer is.

24 Q. And you don't know who built it?

25 A. No. Unless -- unless Brian Johnson gleaned that,

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1 which I've had him do in the past. He's out of nowhere
2 found information about a specific building and a roofing
3 manufacturer. You may -- you could ask him about that.
4 But that -- I would not attribute that necessarily to us
5 knowing -- certainly not me knowing as I sit here today.

6 Q. Okay. Well, I mean, some of these buildings will
7 have a nameplate or something that --

8 A. Yeah.

9 Q. -- identifies it? But you don't know that for
10 this particular -- either one of these two buildings,
11 right?

12 A. I do not, no.

13 Q. 8.5 you have a statement: Any damage to
14 structural elements, the roof deck, clips, fasteners,
15 purlins, will require seal details from a licensed civil
16 or structural engineer before reuse. What is the basis
17 for that?

18 A. Building code.

19 Q. Which one?

20 A. International Building Code. The existing
21 building code which is in place, has exceptions for
22 various components and cladding that take us then to the
23 International Building Code. And within the International
24 Building Code, reuse of certain elements and materials are
25 required to be designed and certified by a structural

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1 engineer of which Mr. Johnson is by the way.

2 Q. All right. Thank you for that. Roof deck,
3 there's no roof deck here unless you're just talking about
4 the metal panels, right?

5 A. Well, that is part of the roof deck. I mean,
6 that's part -- yeah. You know --

7 Q. There is no underlying roof deck?

8 A. No, there is no underlying roof deck?

9 Q. Yeah. All right. And then the clips, we've
10 talked a lot about clips. Clips and fasteners, are those
11 two different things or the same things?

12 A. Well, you have clips and then you have, in some
13 instances, a fastener that would hold the clip to the
14 purlin. So --

15 Q. Something like a screw?

16 A. Screw, bolt, depends.

17 Q. Okay. So, you're saying before anyone uses a
18 screw, it has to have an engineering analysis and it has
19 to be sealed by the engineer?

20 A. That's my interpretation of the code based on my
21 training, with results of the new requirements for
22 components and cladding and wind uplift.

23 Q. Got you. Got you. Yeah, I'm not real sure
24 anybody's gonna do that, do you? Do a complete workup on
25 these of five screws, please.

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1 A. I hear you.

2 MR. ANDIS: All right. Let's take a break.

3 THE REPORTER: Sorry. Off the record at
4 5:34 p.m.

5 (Recess taken)

6 THE REPORTER: All right. On the record at
7 5:42 p.m.

8 Q. (By Mr. Andis) Mr. Irmiter, I'm just about done
9 here. Wanted to just confirm -- I think it's clear, but
10 sometime it's helpful for me if I had it in the one spot.
11 You were not present when the photos of the properties
12 were taken, the photos in your report? You were not
13 present at that -- at that time at the properties, right?

14 A. That is correct.

15 Q. And for your report you're relying on -- in
16 addition to all the other, you know, training, experience,
17 what have you, but with respect to the specifics of these
18 properties, your relying on your inspection in July of
19 2019 and the photos taken by the other people that we
20 talked about earlier that are --

21 A. Yes, for this report. I would also rely on after
22 the report, photos that were taken by Mr. Johnson last
23 week.

24 Q. Okay. But those are not -- I mean, for the
25 report. I'm talking about for the report.

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1 A. Correct.

2 Q. Okay. So, again, you're relying on the photos
3 taken by whoever those guys were we mentioned, I think GD
4 and SRD, Gavin and --

5 A. Scott.

6 Q. Scott. Okay. Thank you. And then your July 19
7 visit, right?

8 A. Correct.

9 Q. Okay. Mr. Irmiter, that's all I have for you.
10 Thank you, sir, for your time.

11 MR. ANDIS: And pass the witness.

12 MR. LUNDQUIST: I'll reserve. Thank you,
13 Mr. Irmiter, for your time.

14 THE REPORTER: Mr. Lundquist, do you need a
15 copy?

16 MR. LUNDQUIST: I do not.

17 THE REPORTER: Okay.

18 MR. LUNDQUIST: But my hunch is Mr. Irmiter
19 wants to read and sign.

20 THE REPORTER: Okay.

21 MR. LUNDQUIST: I'll leave that up to him.

22 THE WITNESS: That is correct.

23 THE REPORTER: Okay. Off the record at 5:44
24 p.m.

25 (Proceedings concluded at 5:44 p.m.)

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1 I, THOMAS IRMITER, have read the foregoing deposition
2 and hereby affix my signature that same is true and
3 correct, except as noted above.

4

5

THOMAS IRMITER

6

7 THE STATE OF _____)

8 COUNTY OF _____)

9

10 Before me, _____, on this day
11 personally appeared THOMAS IRMITER, known to me or proved
12 to me on the oath of _____ or through
13 _____ (description of identity
14 card or other document), to be the person whose name is
15 subscribed to the foregoing instrument and acknowledge to
16 me that he/she executed the same of the purpose and
17 consideration therein expressed.

18 Given under my hand and seal of office on this
19 _____ day of _____, _____.

20

21

NOTARY PUBLIC IN AND FOR

22

23

THE STATE OF _____

24

My Commission Expires: _____

25

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
LAREDO DIVISION

BRABO INTERNATIONAL GROUP, INC.)
Plaintiff,)
vs.) C.A. NO. 5:19-cv-00066
UNITED FIRE & CASUALTY COMPANY)
Defendant.)

REPORTER'S CERTIFICATE
DEPOSITION OF THOMAS IRMITER
SEPTEMBER 24, 2020

I, Anne F. Sitka, the undersigned Certified Shorthand Reporter in and for the State of Texas, certify that the facts stated in the foregoing pages are true and correct.

I further certify that pursuant to Federal Rules of Civil Procedure, Rule 30(e)(1)(A) and (B) as well as Rule 30(e)(2), that review of the transcript and signature of the deponent:

_____ was requested by the deponent and/or a party before completion of the deposition.

_____ was not requested by the deponent and/or a party before completion of the deposition.


I further certify that I am neither attorney or counsel for, related to, nor employed by any parties to the action in which this testimony is taken and, further,

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1 that I am not a relative or employee of any counsel
2 employed by the parties hereto or financially interested
3 in the action.

4 SUBSCRIBED AND SWORN TO under my hand and seal of
5 office on this the _____ day of _____,
6 _____.

7
8 
9



10 Anne F. Sitka, CSR, RPR
11 Texas CSR 7079
12 Expiration: 04/30/2021
13 SLS LITIGATION SERVICES, LLC
14 322 Spring Hill Dr., Suite A70
15 Spring, TX 77386
16 Firm Registration No. 761
17
18
19
20
21
22
23
24
25